BLUE TAG ISSUES (SAS Tower)

Filter ((Cat='Major Issues' OR Cat='Second-Tier Issues' OR Cat='Quality Management Issues') AND Location like '%shanghai%' AND (status='Pending' OR status='Briefing' OR status='Resolved' OR status='Void'))

Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
Major Issues													
116	06-Feb-08	ABF has allowed ZPMC to utilize hydraulic jacks (50 ton capacity) to bring the upper and lower segments of the 114-m mock-up into alignment; this method was not included in the ZPMC's approved mockup fabrication and welding sequence. The three manual hydraulic jacks are positioned within the interior of the segments for the purpose of jacking the skin plates outwards to achieve the required alignment tolerences of the skin plates of the upper and lower sections of the mockup. The misalignment of between the skin "D" and "B" of the upper and lower section was approximately 11mm and 10mm respectively, prior to the use of the hydraulic jacks. Additionally, ABF/ZPMC has deviated from the approved mock-up fabrication plan on the 114m mock-up by using a 50 ton jack to bring the corner stiffener connection plates into alignment. The use of jacks is not in the approved mock-up fabrication procedure, and the manner in which it was utilized does not demonstrate a procedure that is repeatable in actual production.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0045;ZPMC-0088	Team China discussed this issue with ABF/ZPMC on numerous occasions between March through May 2008 and requested a response from the Contractor to address the Department's concerns regarding the misalignment of the shafts and how the Contractor intends to bring the alignment within tolerence. Although no formal response was drafted by the Contractor, the Department and ABF agreed to resolve the issues through a series of Tower Workshops. The Caltrans Tower Team and ABF met during the week of 05-09-May-08 for Tower Fabrication Workshop #1 into in order to gain consensus on the path forward; however, during five (5) additional workshops between Caltrans, ABF and ZPMC, the Contractor has agreed to perform some additional tests to address the Department's concern regarding the 114m mock-up. In accordance with the minutes of the Tower Workshop #4 and State Letter 05.03.01-002207, the Department and ABF/ZPMC agreed to proceed with: (1) Distortion monitoring during first shaft production and (2) Stress measurement test of bolts. Furthermore, the Department provided recommendations for distortion monitoring in order to aide the Contractor's effort. The Contractor has been providing the distortion monitoring data as requested in State Letter 2207 and has provided survey measurements of the unbolted shaft sections. This data has been reviewed by the Department and it has been determined that the unrestrained shaft geometry is similar to the previous survey measurements and shows the jacks did not plastically deform the material. During the week of 07-Sep-08 the Contractor began preparations to perform the Bolt Verification Study. In November 2008, ABF completed their measurements of the bolts for the Bolt Verification Study and submitted the data on November 20, 2008 to Team China. The raw data shows that the bolts were no elongated after the guide plates were removed. ABF is generating a letter to supplement the previously submitted data with a request for acceptance.	ABF-NPR-000014R00; ABF-NPR-000104R00. Issued to Contractor (NCT-0008) and (NCT-0056). Concurs with METS/Design.	See summary of proposed resolution.					Resolved
128	15-Feb-08	ABF/ZPMC have produced welds in the 77-m and 89-m Mock-Up that do not meet the minimum requirements for mock-up fabrication. Weld cracks, as defined by AWS D1.5, were found at five (5) locations in the 77-m Mock-Up and in eight (8) locations in the 89-m Mock-up at the junction of the fitting lug to the longitudinal stiffener. As required by the Special Provisions, Section 10-1.59, "Fabrication/Erection Procedure and Mock-Ups", Page 313, paragraph B.1, weld cracks are considered unsatisfactory regarding the acceptance of the Tower Mock-Ups. ABF/ZPMC welded the 89m Partial mock-up fit-lug to diaphragm connection (MUB-MA21-A/J-26) on 02-SEP-08 and performed the MT inspection 24 hours after completion welding on 03-SEP-08. During the MT inspection a 250 mm crack was discovered. Weld cracks, as defined by AWS D1.5, are considered unsatisfactory is not in conformance according to Special Provisions, Section 10-1.59, "Fabrication/Erection Procedure and Mock-Ups", Page 313, paragraph B.1. and AWS D1.5-2002, Section 6.26.1.1.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0064;ZPMC-0176	(Note: Some correspondence has been truncated in order to show only the most recent events. The deleted information has been saved in another portion of this report.) During the week of October 17, 2008, ABF issued a letter to ZPMC to continue fit lug partial mock ups using different variables (fit lug size, weld size, and eletrode type). On October 27, 2008 ZPMC began welding the 22m fit lug partial mock-ups. In performing the partial mock-ups, the Contractor used three different trials: The first location 150mm fit lugs were used on both sides of the stiffeners in accordance with weld Trial 4 of the table (provided in the Weekly METS Update). The fit lug to stiffener welds were welded first using E71T-1 electrode which is the electrode that ZPMC has been using previously to weld the fit lugs. The fit lug to diaphragm welds were welded using ABF purchased electrode with 1% nickel content. This electrode is the same "high nickel electrode" referred to in table referenced above. ZPMC was able to maintain their post weld cooling procedure which dictates that the weld cools no more than 40 degrees	ABF-NPR-000026R00; Issued to Contractor (NCT-0035). Concurs with METS and have issued a letter rejecting the 77-m/89-m mock-ups until the Contractor can identify the root cause and propose a successful resolution that can be used in production. Per the Tower Workshop, Construction has agreeed to allow the Contractor to proceed with a partial mock-up to demonstrate they can weld the fit-lugs without cracking the welds. The Contractor's ability to proceed with these welds in production are pending the results of this mock-up.	See summary of proposed resolution.					Resolved

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Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
						Celsius per 30 minutes for all four welds. Magnetic particle testing of the welds revealed one crack in one of the fit lug to diaphragm welds (MUB-MA21A/J-57), the remaining three welds tested were found to be acceptable at the 24, 48, and 72 hour tests. ABF/ZPMC accounted for the crack because of improper grounding and the multiple heat cycles that the weld was subject to. ABF/ZPMC corrected both the grounding and eliminated the multiple heat cycles in subsequent welds and no other cracks were found during non destructive testing. At location two, ZPMC substituted the 150mm width fit lug for a 75mm fit lug due to interference with a penetration on one side. The fit lug was welded in accordance with Trial 2, with the higher nickel electrode being used to weld the fit lug to diaphragm. The opposite side the 150mm fit lug was used in accordance with weld trial 3. ZPMC maintained the temperature of the welds during the post weld cool down and NDT at 24, 48, 72 did not show indications. At location three, ZPMC used the 75mm wide fit lugs for both sides of the stiffener in accordance with the parameters of weld trial 1. Of note, this is the original fit lug design that ZPMC had been previously unsuccessful welding without cracks. In this location, ZPMC maintained the post weld cooling range and NDT at 24, 48, 72 hours did not show indications. At the completion of the mock-ups, ABFJV has submitted a letter (ABF-CAL-LTR-000758) requesting acceptance of the 89m mock-up based on the completion of the fit lug partial mock -ups done on the 89m mock-up. As stated before, the final acceptance of the 77m mock-up is also based on the acceptance of the partial mock-ups from the 89m mock-up. Currently the letter is under review by the Department.						
134	18-Feb-08	The Summary of this issue has been moved to BTL Item #128.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0052;ZPMC-0073	See BTL Item #128.	ABF-NPR-000099R00; ABF-NPR-000116R00; Issued to Contractor: NCT-0009; NCT-0043. See BTL Item #128.	See BTL Item #128.				23-09	Resolved
135	18-Feb-08	The summary of this issue has been moved to BTL Item #128.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0053	See BTL Item #128.	ABF-NPR-000096R00; Issued to Contractor: NCT -0010. See BTL Item #128.	See BTL Item #128.					Resolved
138	07-Mar-08	ABF/ZPMC has produced welds in the Tower 77-m and 89-m mock-ups that do not meet the minimum requirements for mock-up fabrication as required by the Special Provisions, Section 10-1.59,"Fabrication/Erection Procedure and Mock-Ups",paragraph B.1. Weld cracks, as defined by AWS D1.5, are considered unsatisfactory regarding the fabrication of the tower mock-ups and five (5) cracks were found in the Partial Joint Penetration (PJP) welds at the stiffener to diaphragm connection and one (1) in the fillet weld at the stiffener fitting lug to diaphragm connection.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0083	(Note: Some correspondence has been truncated in order to show only the most recent events. The deleted information has been saved in another portion of this report.) On November 9, 2008, ABF/ZPMC began welding the final iteration of the PJP partial mock-ups. The Contractor chose to use a different approach this time by using three (3) different scenario's for welding the PJP welds: The first location the Contractor welded another 22m fillet weld trial (similar to the fit-lug trials). At this location 75mm wide plates were used on both sides of the stiffener. High nickel electrode, E7018-C3L, was used to weld the fit lugs to diaphragms and Supercored 71H was used to weld the fit lug to stiffener welds. Post weld temperature was maintained in accordance with ZPMC's procedure and NDT at 24, 48, 72 hours did not show indications. At location two, 75mm wide plates were used again but one side remained a 22m fillet while the other was a PJP. On the fit lug where 22mm fillet was used, ZPMC welded the fit lug to stiffener weld using FCAW and E71T-1 electrode and SMAW and high nickel electrode E7018-C3L on the fit lug to stiffener weld. On the PJP side, a 75mm wide fit lug and a PJP with a 10mm penetration and 12mm bevel were used. The electrodes were used in the same locations as the 22mm fillet at this location. Post weld temperature was maintained in accordance with ZPMC's procedure and NDT at 24, 48, 72 hours	ABF-NPR-000106R00; Issued to Contractor (NCT -0050). Concurs with METS and have issued a letter rejecting the 77-m/89-m mock-ups until the Contractor can identify the root cause and propose a successful procedure that can be used in production. Although the Contractor has requested the Department to accept their partial mock-up, Construction has rejected the Contractor's request until they can produce PJP welds at this location that are acceptable.	Concurs with Construction and METS.				Resolved

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						did show indications. There were two locations MUB-MA21G/J-30 and MUB-MA21G/J-65 where QA observed that grinding was done after MT. ABF explained that at those locations the lines between weld passes had been mistaken for indications and ground again. Subsequent MT showed no indications. At location three, 75mm plates were used and both sides utilized PJP welds for the fit lugs. ZPMC welded the fit lug to stiffener weld using FCAW and E71T-1 electrode and SMAW and high nickel electrode E7018-C3L on the fit lug to stiffener weld. All welds had a penetration of 10mm with a 12mm bevel. Post weld temperature was maintained in accordance with ZPMC's procedure and NDT at 24, 48, 72 hours did not show indications. Based on these trials, ABF/ZPMC has welded three (3) 75mm fit lugs with PJP welds without cracks and five (5) 75mm fit lugs with 22mm fillets without cracking using various electrodes. At the completion of the mock-ups, ABFJV has submitted a letter (ABF-CAL-LTR-000758) requesting acceptance of the 89m mock-up based on the completion of the fit lug partial mock -ups done on the 89m mock-up. As stated before, the final acceptance of the 77m mock-up is also based on the acceptance of the partial mock-ups from the 89m mock-up. Currently the letter is under review by the Department.						
169	22-Oct-08	ABF has not provided the Engineer with safe access to the perform Quality Assurance verification inspections of the ongoing welding operations in the South and East Tower shafts. As of October 14, 2008 the East tower shaft assembly became a permit-required confined space (possibly a hazardous permit required confined space) as defined by OSHA. As of October 29, 2008, South Shaft Tower assembly also became a permit-required confined space as defined by industry standards with the placement of Skin D. The Contractor elected to continue welding on both shaft after the dates listed above, and thus no Quality Control or Quality Assurance inspections were performed after the dates listed above.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ABF-0006	ABF implemented their confined spaces entry program on October 20, 2008 and ABF subcontractor inspectors began conducting QC inspections of welding after that date. However, the Team China inspector's did not enter the confined space until December 2, 2008, but only to conduct a survey of the completed work. Although, the Department's personal air monitor's and radio's arrived in China and cleared customs, the Department is evaluating ABF's confined space entry program to ensure it is consistent with the requirements of the Department's confined space requirements. Until this is approved, the Team China inspector's are not permitted to enter the confined space's unless no welding or cutting is being performed.	ABF-NPR-000170R00; NCT-0177. Construction concurs that the areas are now considered confined spaces as defined by OSHA and have instructed no State Staff is permitted to enter until an approved confined space course is issued to staff and a confined space safety plan has been implemented.	Concurs with Construction.					Resolved
272	22-Sep-10	Tower Shipment No. 2 Punchlist signed by both the Department and ABFJV on September 23rd, 2010 notes seven(7) "Category D" items are to be completed Stateside in Oakland. Reference the METS Discussion area of this report for a summary of these items.		Changxing Island, Shanghai, P.R. China		Documented repairs and inspection of items listed will commence in Oakland. Please reference the "Tower Outstanding Punch List Shipment No.2" for further details. This combined punchlist is issued with State Letter 05.03.08-000039. Letter confirms the Department and ABF are in agreement with the 7 items listed in the Punchlist.							Pending
278	18-Nov-10	Tower Shipment No. 3 Punchlist signed by both the Department and ABFJV on Nov 22,2010 notes seventeen(17) "Category D" items are to be completed Stateside in Oakland. Reference the METS Discussion area of this report for a summary of these items.		Changxing Island, Shanghai, P.R. China		Documented repairs and inspection of items listed will commence in Oakland. Please reference the "Tower Outstanding Punch List Shipment No.3" for further details. This combined punchlist is issued with State Letter 05.03.08-000040. Letter confirms the Department and ABF are in agreement with the 17 items listed in the Punchlist.	Construction concurs with METS						Pending
280	30-Dec-10	Contractor reported that due to the geometry of the Tower Grillage the Complete Joint Penetration(CJP)weld between the E face Skin Plate and the Longitudinal Grillage Plate at the D/E intersection, which requires 100% UT, can not be fully examined(scanned)to the criteria set out in Contract Standards i.e AWS D1.5 requirements.		Changxing Island, Shanghai, PRC		Refer to METS Discussion area for Proposed Resolution and actions taken.							Resolved
281	27-Jan-11	Tower Shipment No. 4 (Lifts 4 and 5) Combined Punchlist signed by both the Department and ABFJV on Jan 26, 2011 notes eleven (11) for Lift 4 and fifteen (15) Category 'D' items for Lift 5 are to be completed Stateside in Oakland. Reference the METS Discussion area of this report for a summary of these items.		Changxing Island, Shanghai, P.R. China		Documented outstanding works, repairs and inspection of items listed will commence in Oakland. Please reference the "Tower Shipment 4 (Voyage 7) Combined Punchlist for Oakland", for Lift 4 and Lift 5 for further details. This combined punchlist is issued with State Letter	Construction concurs with METS						Pending

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						05.03.08-000042. Letter confirms the Department and ABF are in agreement with the total of 26 items for Lifts 4 and 5 listed in the Punchlist.							
282		Tower Shipment No. 4 (Lift 5) Punchlist signed by both the Department and ABFJV on Jan XX,2010 notes XX(XX) "Category D" items are to be completed Stateside in Oakland. Reference the METS Discussion area of this report for a summary of these items.		Changxing Island, Shanghai, P.R. China		Documented repairs and inspection of items listed will commence in Oakland. Please reference the "Tower Outstanding Punch List Shipment No.4 (Lift 5)" for further details. This combined punchlist is issued with State Letter 05.03.08-000040. Letter confirms the Department and ABF are in agreement with the XX items listed in the Punchlist.	Construction concurs with METS						Void
283	19-May-11	Tower Shipment No. 5 (Lift 6 Tower Head and Lift 1 Skirt plates) Combined Punchlist signed by both the Department and ABFJV on May 18, 2011 notes sixteen (16) for Lift 6 and two (2) Category 'D' items for Lift 1 Skirt plates are to be completed Stateside in Oakland. Reference the METS Discussion area of this report for a summary of these items.		Changxing Island, Shanghai, P.R. China		Documented outstanding works, repairs and inspection of items listed will commence in Oakland. Please reference the "Tower Shipment 5 (Voyage 8) Combined Punchlist for Oakland", for Lift 6 and Lift 1 for further details. This combined punchlist is issued with State Letter 05.03.08-000044. Letter confirms the Department and ABF are in agreement with the total of 18 items for Lifts 6 and 1 listed in the Punchlist.	Construction concurs with METS.						Pending
Second-Tier Issues													
1	18-Jul-06	ZPMC has requested to substitute material for the preliminary mock-ups due to availability of the steel. The Contractor plans to substitute A709M Grade 250 for A709M Grade 345, A709M HPS 485w, Shear Link Grade 345, and Shear Link Grade 485.	Tower Mock-Ups	ZPMC, Shanghai, China	ABF-RFI-000040R00;ABF-RFI-000040R01;ABF-RFI-	METS concurs with Design provided that the Procedure Qualification Records (PQR) will still be required for welding and will be required for the substituted materials used in the mock-up as required in the Special Provisions, Section 8-3, Welding,	Concurs with METS and Design	The proposed material substitution of A709M Grade 250 (36ksi) for A709M Grade 345 and Shear Link Grade 345 is acceptable. The proposed substitution of A709M Grade 345 for Shear Link Grade 345 and the proposed substitution of A709M HPS Grade 485W for Shear Link Grade 485 are acceptable for the purposes of the mock-up only.					Void
3	31-Jul-06	ZPMC believes the connection between the connection plate and the stiffeners at Elevation 89.000m on Plate D (Sheet 587) is not constructable as shown in the contract drawings as stiffener plate D4 changes size from 275mm to 400mm at Elevation 89.000m. ZPMC is requesting to relocate the joint for the D4 stiffener from Elevation 89.000m to a height of 25mm above the top diaphragm plate.	Tower Connection Plate and Sti	ZPMC Shanghai, China	ABF-RFI-000060	METS defers to Design.	Concurs with Design	In order to accommodate the connection between the connection plate and longitudinal stiffeners on Skin Plate D at Elevation 89.0, the Design Team has reolcated the D4 stiffener transition to Elevation 88.470 (25 mm below the bottom diaphragm plate).					Void
8	07-Aug-06	Sheet 531 shows a tower access opening above Elevation 89.000m on skin plate A with a doubler plate around the access hole opening (Sheet 920). The Contractor believes the access hole opening is not critical in terms of the mock-up and is requesting that the access hole doubler plate be removed from the mock-up.	Access Hole Doubler Plate at E	ZPMC Shanghai, China	ABF-RFI-000080	METS takes no exception to the Contractor's requested changes.	It is acceptable for the access hole doubler plate of Plan Sheet 920 of 1204 to be removed from the mock-up at Elevation 89.000m.	Design takes no exception to the Contractor's requested changes.					Void
9	08-Aug-06	The Contractor believes the location of the slot in the built -up channel and slotted shear tab, shown in Section Q-Q, 575, significantly reduces the edge distance of the top and bottom slotted shear tab plates, built up channel, and their respective bolts. Additionally, the Contractor believes the connection bolts required for the built up channel and slotted shear tab plate interfere with the Seal Plate connection bolts. ABF is requesting to move the location of the bolts in the slotted shear tab in order to allow appropriate clearances for the seal plate connection.	Slotted Shear Tab	ZPMC Shanghai, China	ABF-RFI-000084	METS defers to Design.	Concurs with Design	Design finds the Contractor's detailed proposal is acceptable. Please note that the Seal PL 6X200X360 shall be trimmed 35mm to become 6X200X325 so that the left end will be flush against the web of the built-up channel. Any changes to the M16 bolts spacing, including the edge distances, shall be adjusted accordingly.					Void
12	16-Aug-06	Detail A of sheet 590 / 1204 shows the perimeter channel to skin plate connection bolts local to the intersection of Skin Plates "A" & "E." The Contractor understands the connection bolt closest to the longitudinal stiffener on Skin Plate E, with a specified edge distance of 50 mm, will land on Skin Plate E's welded transition from 80 mm to 60 mm thickness. The Contractor is requesting to omit this bolt in order to avoid encroachment on the weld.	Perimeter Channel to Skin Plat	ZPMC Shanghai, China	ABF-RFI-000096	METS defers to Design.	Concurs with Design	The bolt in question will not be omitted. This bolt may be moved to clear the transition in Skin Plate E. The adjacent bolt spacing may be increased from the specified 125mm max dimension, as shown on the plan sheets, for this location only.					Void
15	27-Aug-06	Detail E on Sheet 587 shows the PJP joining the connection plate to the longitudinal stiffener plate. Since the connection plate is much shorter than the longitudinal stiffener, ABF is requesting to provide a beveled cutout in the stiffener which is the length of the connection plate +5mm at the top and bottom for clearance. ZPMC will be responsible for providing the weld preps along with any weld transitions for thickness variations.	Longitudinal Stiffeners	ZPMC Shanghai, China	ABF-RFI-000128	METS takes no exception to the Contractor's requested changes.	Concurs with METS and Design	It is acceptable for the Contractor to weld the connection plates to the tower longitudinal stiffeners according to the Contractor's RFI attachment. However, the weld transition shall be filled with weld material.					Void
19	20-Sep-06	Material substitution of A709, A913 and A992 for A709M steel.	SAS	ZPMC Shanghai, China	ABF-RFI-000145R00	Accepted, provided that the Contractor assumes responsibility for fit-up and accounts for the changes in the weight control procedure.							Void
24	13-Sep-06	ZPMC's preliminary assembly process for the tower is to: 1. Layout Skin Plate A 2. Assemble the diaphragm and 3. Assemble Skin Plates E, B, and C to the diaphragm. ZPMC is proposing to change the typical diaphragm cope	Diaphragm Cope Details	ZPMC Shanghai, China	ABF-RFI-000167	METS defers to Design.	Concurs with Design						Void

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		details adjacent to skin plates B and C as they believe this will simplify their fabrication process.											
45	10-Nov-06	ZPMC proposes to change the standard bolt hole in the shear connection plate to a long slotted hole on Contract Drawing 591/1204, Section B-B. The long slotted hole will allow the Perimeter Channels to be retracted during the fit up of the diaphragm plate to the Tower Skin. This change will apply to the Perimeter Channels connecting to Tower Skin A, B and E.	Tower Diaphragm Perimeter Chan	ZPMC Shanghai, China	ABF-RFI-000315	METS defers to Design.	Concurs with Design	The response to RFI 262 confirmed that the perimeter channels shall be welded to the diaphragm PL. Therefore, the slotted holes cannot be used for this erection unless these welds are performed in the field. Alternatively, the use of shim pates between the perimeter channel and the tower skin plate is permissible. Note that the use of this option may require the resubmission of shop drawings already reviewed.					Void
46	21-Nov-06	ZPMC would like to substitute the following bolts for the tower mock ups only. GB/T-1228 Grade 8.8S in lieu of A325-X GB/T-1228 Grade 10.9S in lieu of A490-X The properties of the bolts have been included as part of the RFI; however, the translation is difficult to understand.	Tower Mock-Up Bolts	ZPMC Shanghai, China	ABF-RFI-000343	METS defers to Design.	Concurs with Design	The proposed heads of bolts GB/T-1228 Grade 8.8S and 10.9S are shorter than A325 and A490 bolts. The height of the nuts is not clear from the provided information. The contractor may use the substitute bolts, but shall add washers to represent the missing head and nut heights.					Void
47	21-Nov-06	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000344R00;ABF-RFI-000344R01;ABF-RFI-		We are not familiar with the mock up referenced. The proposed revision to the details for the diaphragm copes cannot be approved at this time.						Void
48	21-Nov-06	In order to improve welding quality where the diaphragm connects to Plate A-E and D-E, the fabricator ZPMC is to modify the diaphragm cutting the corner pieces out and be welded later with a CJP to the diaphragm and a 1 sided PJP to the skin plates per ABF RFI 000349R00. The Contractor believes the altered diaphragm would allow for better access to make the welds between the skin plates.	Tower Diaphragm	ZPMC Shanghai, China	ABF-RFI-000350	The requested weld diaphragm splices are acceptable as "Note 5" on Sheet 588 of 1204 gives the Contractor permission to propose a diaphragm assembly layout. From ABF-RFI-349R0, single sided PJP weld is allowed between diaphragm and skin plate. However, th	Concurs with METS and Design	Concurs with METS					Void
49	21-Nov-06	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000351R00	See response from Design.	Concurs with Design	<Long Text>					Void
52	22-Nov-06	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000353	METS concurs with the request for alternative painting applicators in areas not easily accessible to spray application, provided the Contractor can demonstrate to the satisfaction of the Department that alternative applicators do not leave residual material. Please note the requirements set forth in Section 10-1.69 of the Special Provisions and Section 59-2.13, paragraph 2 of the Standard Specifications.	Concurs with METS and Design	In order to facilitate the Contractor?s assembly procedure it is acceptable to terminate fillet welds 4 mm +1/-1 short of the ends of the diaphragm fit lugs or the edges of stiffener copes in the diaphragms.					Void
58	05-Dec-06	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000399	METS defers to Design.	Concurs with Design.	ABF has proposed to provide permanent cutouts in the tower diaphragm webs in order to install the tower struts without field welding of stiffeners. This proposal has been evaluated and found to be acceptable.					Void
60	11-Dec-06	1. ZPMC is requesting to eliminate the splice shown on contract sheet 570R1/1204 and fabricate the top & bottom flanges each as single unit. 2. If the splice is required, ZPMC is requesting a rathole be approved at the CJP splice in the flanges (shown on sheet 571/1204 section B-B). The rathole would be in the web.		ZPMC Shanghai, China	ABF-RFI-000417	METS defers to Design.	Concurs with Design	1. The Contractor's proposal to fabricate the crossbrace top and bottom flange plates as single units is acceptable. 2. Ratholes are not acceptable in the crossbrace webs, as they will remain a source of corrosion. The webs shall be installed without gaps.					Void
61	12-Dec-06	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000427	METS defers to Design.	Concurs with Design	1. The proposed material substitution is acceptable. 2. It is confirmed that the retainer ring does not need to have a TTP. The Contractor's suggestion to eliminate the TTP for the diaphragm in the cross bracing is acceptable.					Void
65	26-Jan-07	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000520	METS takes no exception to the Contractor's requested changes.	Concurs with METS and Design	The material substitution proposed is acceptable for the mock-up.					Void
66	29-Jan-07	ZPMC believes the triangular diaphragm plates as shown in DETAIL A of sheet 541R1/1204 creates some construction difficulty, but do not appear to have much structural significance. ZPMC is requesting to eliminate all the triangular diaphragm plates on Diaphragms 1A, 1B, 2A, 2B, 2C, 3A and 3B.		ZPMC Shanghai, China	ABF-RFI-000525	METS defers to Design.	Concurs with Design	The triangular plates at the tower corners are required by design code to ensure stability of the tower skin plates and can not be eliminated. As discussed at the Working Drawing Campus, it is possible that additional analysis and modeling of this specific location could provide a technical basis to justify removing the plates. Such analysis would be a cost to the State and require several weeks to obtain results.					Void
68	05-Feb-07	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000544	METS defers to Design.	Concurs with Design	The Contractor's proposed change is acceptable as requested. Please note that with the increase in stiffener width, the gap between stiffener E7 and D4 is reduced. It is the responsibility of the Contractor to ensure adequate access to corner DE for construction.					Void
69	06-Feb-07	<Long Text>		ZPMC, Shanghai, China	ABF-RFI-000546	The Contractor's proposed material substitution is acceptable for the mock-up only. This reponse resolves this RFI.		The Contractor's proposed material substitution is acceptable for the mock-up only.					Void

Filter ((Cat='Major Issues' OR Cat='Second-Tier Issues' OR Cat='Quality Management Issues') AND Location like '%shanghai%' AND (status='Pending' OR status='Briefing' OR status='Resolved' OR status='Void'))

Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
72	20-Feb-07	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000572	METS does not recommend approval of this material substitution.	Concurs with METS and Design	Design does not recommend approval of this material substitution.					Void
73	20-Feb-07	ZPMC?s understanding of the supplementary requirements for rolled shapes in Special Provisions is only the CE requirement on Page 299, in subsection ?material? states that, ?The Carbon Equivalent (CE) shall not exceed 0.52% where CE = C + (Mn + Si)/6 + (Cr + Mo + V)/5 + (Ni + Cu)/15 for Grade 345 unless otherwise noted.? ZPMC believes the other supplementary requirements for structural steel in Special Provisions are for steel plates only.		ZPMC Shanghai, China	ABF-RFI-000574	The rolled shapes shall conform with the Supplemental Requirements stated under Materials in Special Provisions 10-1.59.	Concurs with METS	Concurs with METS					Void
77	14-Mar-07	Regarding Contract sheet 604/1204, the bracing post in the drawing is specified as A500 Gr. B 203×203×15.9 Tube Steel. ZPMC is claiming they can only find A500 Gr. B 200×200×16 on the market. Therefore, ZPMC is proposing to use A500 Gr. B 200×200×16 in lieu of A500 Gr. B 203×203×15.9 for the subject bracing posts.		ZPMC Shanghai, China	ABF-RFI-000624	In accordance with Special Provisions Section 8-1.01, the contractor's proposed substitution is acceptable.	Concurs with METS and Design	In accordance with Special Provisions Section 8-1.01, the contractor's proposed substitution is acceptable.					Void
78	14-Mar-07	ZPMC is proposing to substitute the M24 A307 bolts used on the tower strut façade with M24 GB standard bolts supplied by a local manufacturer. This substitution is for the mock-up only.		ZPMC Shanghai, China	ABF-RFI-000625	The Contractor should be allowed to use the bolts referenced for the Tower Mock-Ups only.	Concurs with METS and Design	The proposed bolt substitution for the tower mock-up only is acceptable.					Void
81	10-Apr-07	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000650	The contractor's fabrication, assembly and erection of the tower saddle grillage details shall ensure proper installation and fit of the grillage top plate (plan sheet 612/1204) and the tower suspender brackets. The tower grillage splice plates shall have							Void
82	10-Apr-07	<Long Text>		ZPMC Shanghai, China	ABF-RFI-000651	The contractor's fabrication, assembly and erection of the tower saddle grillage details shall ensure proper installation and fit of the grillage top plate (plan sheet 612/1204) and the tower suspender brackets. The tower grillage splice plates shall have							Void
84	25-Apr-07	ZPMC claims to be having trouble finding A709M Gr345 shim plates which are 10mm or less in thickness and is requesting to use material specification for GB Q235A (Chinese Standard Specification) Steel. Thus ZPMC is requesting to use GB Q235A in lieu of A709M for shim plates.		ZPMC Shanghai, China	ABF-RFI-000672	The substitution is not acceptable.	Concurs with METS and Design	The substitution is not acceptable.					Void
86	25-Apr-07	ZPMC claims to be having trouble finding A709M Gr345 shim plates which are 10mm or less in thickness and is requesting to use material specification for GB Q235A (Chinese Standard Specification) Steel. Thus ZPMC is requesting to use GB Q235A in lieu of A709M for shim plates.		ZPMC, Shanghai, China	ABF-RFI-000672R00	METS does not recommend approval of this material substitution.	Concurs with METS and Design.	Design does not recommend approval of this material substitution.					Void
87	03-May-07	ABF/ZPMC are requesting to modify multiple weld details (WD7, WD8, and WD10) as they are called out on contract drawings 596 and 597R1 with the proposed details shown on in ABF-RFI-688R00.		ZPMC, Shanghai, China	ABF-RFI-000688R00	<Long Text>	Concurs with METS and Design.	1. Welds WD7 and WD8 meet the size requirements as specified on plan sheets 596 and 597R1. 2. Weld size WD10 shall be 23 mm (not 20 mm shown on the RFI sketch). The detail shall be revised accordingly. 3. It is noted that in accordance with AWS D1.5 Section 2.3.1.3, the flat/horizontal welding position allows the elimination of the 3 mm weld size reduction per weld.					Void
88	14-May-07	<Long Text>		ZPMC, Shanghai, China	ABF-RFI-000700R00	METS defers to Design.	Concurs with Design.	The Contractor's request to install the fit lug plates to the bottom face of the bottom diaphragms 2A, 2B, 2C, 3A and 3B in order to simplify fabrication is acceptable.					Void
89	17-May-07	<Long Text>		ZPMC, Shanghai, China	ABF-RFI-000708R00	METS takes no exception to the Contractor's request to enlarge the cope hole; however, the requested size increase (60mm to 275mm) appears to be excessive. METS understands the Contractor's need for more access and recommends approving the Contractor's request to increase the size of the cope hole (proposed cope A); however, METS defers to the Design Team regarding a more appropriate size for the cope hole.	Concurs with Design.	<Long Text>					Void
90	06-Jun-07	<Long Text>		ZPMC, Shanghai, China	ABF-RFI-000736R00	<Long Text>	<Long Text>	<Long Text>					Void
92	19-Jun-07	<Long Text>		ZPMC, Shanghai, China	ABF-RFI-000751R00;ABF-RFI-	<Long Text>	<Long Text>	Defers to METS.					Void

Filter ((Cat='Major Issues' OR Cat='Second-Tier Issues' OR Cat='Quality Management Issues') AND Location like '%shanghai%' AND (status='Pending' OR status='Briefing' OR status='Resolved' OR status='Void'))

Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
93	19-Jun-07	(a) ZPMC is requesting to use A106 Grade B.material for NPS Ø32 pipe (both XS and STD) shown on Contract Sheets 923,924/1204. (b) ZPMC is requesting to use A106 Grade B.material for the Railing S11 (Ø25 & Ø32) shown on Sheet 926/1204.		ZPMC, Shanghai, China	ABF-RFI-000753R00	METS did not comment.	Concurs with Design.	<Long Text>					Void
94	16-Jul-07	ZPMC is requesting confirmation whether the weld details (MWT-18, MWT-19, MWT-20, MWT-21 and MWT-22) shown on the welding chedule (MU-WDT-2) can be qualified as an AWS standard joint.		ZPMC, Shanghai, China	ABF-RFI-000792R00	<Long Text>	It is acceptable to qualify weld details MWT18, MWT19, MWT20, MWT21 and MWT22 from submittal ABFSUB-000093R01 in the same manner as AWS standard joints.	Defers to METS.					Void
95	17-Jul-07	1. Per the Contract Sheet 571/1204, the material for 170 Dia pin is A668 Grade F. ZPMC is requesting to use GB/T699-1999 Grade 45 steel in lieu of A668 Grade F. 2. ZPMC is requesting clarification of the material type for the nut which is show in SECTION C-C in Contract Sheets 571/1204 as A709M GR 345.		ZPMC, Shanghai, China	ABF-RFI-000802R00	The Contractor's proposed material substitution is not acceptable.	Concurs with Design.	1. The proposed substitution is not acceptable as the proposed material does not meet ASTM A668 Grade F the minimum elongation requirements. 2. The material for the nut shown in Section C-C on plan sheet 571/1204 is A709M Gr. 345.					Void
96	23-Jul-07	ZPMC is not able to find MC250*42.4 (as highlighted on the attached Contract Drawing No. 589) in the market and this rolled shapes will be used in the fabrication of lift 1. Therefore, ZPMC is proposing to use coldbend shapes in lieu of rolled shape.		ZPMC, Shanghai, China	ABF-RFI-000815R00	METS defers to Design.	This RFI cannot be reviewed without details showing bent plate geometry and bolt hole locations. Please note the edge distance requirement for non-rolled sections is different from that of rolled shapes. The following information will need to be supplied for consideration of this proposal: 1. Total quantity of steel proposed for substitution. 2. Specific reason why the specified steel was unavailable.	This RFI cannot be reviewed without details showing bent plate geometry and bolt hole locations. Please note the edge distance requirement for non-rolled sections is different from that of rolled shapes.					Void
97	23-Jul-07	ZPMC is not able to find L76*76*11.1 (as highlighted on the attached Contract Drawing No. 590) in the market and this rolled shapes will be used in the fabrication of lift 1. Therefore, ZPMC is proposing to use coldbend shapes in lieu of rolled shapes.		ZPMC, Shanghai, China	ABF-RFI-000816R00	METS defers to Design.	The proposed substitution will be considered after the following additional information is supplied: 1. Total quantity of steel proposed for substitution. 2. Specific reason why the specified steel was unavailable.	The proposed substitution is acceptable at no cost to the State. Otherwise the Contractor shall provide the shape specified in the Contract Documents.					Void
98	23-Jul-07	ZPMC is not able to find MC 150*17.8 (as highlighted on the attached Contract Drawing No. 929) in the market, and is requesting to utilize C 180*22 in lieu of MC 150*17.8		ZPMC, Shanghai, China	ABF-RFI-000819R00	METS defers to Design.	The Contractor's proposed shape substitution is not acceptable because the transverse section properties of the proposed shape are well below those of the original shape. To be acceptable, all the section properties of the substitute shape shall meet or exceed the original shape properties (Special Provisions Section 8-1.01 - Substitution of Non-Metric Materials and Products/B).	The Contractor's proposed shape substitution is not acceptable, because the transverse section properties of the proposed shape are well below those of the original shape. To be acceptable, all the section properties of the substitute shape shall meet or exceed the original shape properties (Special Provisions Section 8-1.01 - Substitution of Non-Metric Materials and Products/B).					Void
99	24-Jul-07	ZPMC is proposing to use approximate size members in lieu of the TS 102*51*9.5, TS 51*51*6.4 and TS 102*102*6.4 shown in Contract Sheets 926, 929, 931/1204. The changes are as follows: Original Proposal TS 102*51*9.5 TS 101.6*50.8*9.5 TS 51*51*6.4 TS 50.8*50.8*6.4 TS 102*102*6.4 TS 101.6*101.6*6.4		ZPMC, Shanghai, China	ABF-RFI-000823R00	METS defers to Design.	The proposed substitution will be considered after the following additional information is supplied: 1. Total quantity of steel proposed for substitution 2. Specific reason why the specified steel was unavailable	The Contractor's proposed TS shapes are considered equivalent to those specified on the plans and are therefore acceptable at no cost to the State.					Void
100	18-Jun-07	ZPMC is finding it difficult grind the Diaphragm-Skin PJP weld end (near longitudinal stiffener) due to inadequate space to operate a pencil grinder. ZPMC is requesting to enlarge the cope hole for both mock-up and tower production to allow access to grind the area with a pencil grinder.		ZPMC, Shanghai, China	ABF-RFI-000748R00	METS takes no exception to the Contractor's proposal to increase the size of the weld access areas as shown in the Contractor's request (RFI attachments 1 and 2) provided that the Design team reviews the proposal and finds it acceptable. However, it should be noted that the Contractors typical cope detail for the mock-up differs from their detail for production of actual components. METS has some concern with this modification as the cope design and spacing used during mock-up fabrication should be similar to what is being used in the fabrication of the actual components in order to validate their fabrication procedures.	The Contractor's proposal to enlarge the ratholes in the diaphragms along the longitudinal stiffeners for the mock-ups and the tower is acceptable.	The contractor's proposal to enlarge the ratholes in the diaphragms along the longitudinal stiffeners as indicated on the sketches attached to the RFI is acceptable for the mock-ups as well as for the tower production.					Void
101	08-Oct-07	The Contractor has allowed the fabricator to proceed with making repairs to defects found in the complete joint penetration (CJP) welds connecting the longitudinal stiffeners to Skin Plate D of the 114m mock-up. These indications were found using Ultrasonic Testing (UT) at lengths greater than 10% of the cumulative length of the welds. These repairs are considered unsatifactory to the Department regarding mock-up fabrication requirements.	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0010	METS has provided independent verification of the welding and non-destructive testing and concurs that the welding procedure modification made by ABF/ZPMC have helped reduce the amount of defects in these welds.	ABF-NPR-000011R00; Issued to Contractor: NCT -0072. In progress.	In progress.					Resolved
102	02-Oct-07	The Contractor has allowed the fabricator to proceed with making repairs to defects found in the complete joint penetration (CJP) welds which connect the longitudinal stiffeners to Skin Plates A and E of the 77m mock-up. These indications were found using Ultrasonic Testing (UT) at lengths greater than 10% of the cumulative length of the welds (Skin Plate A weld defects were between . These repairs are considered unsatisfactory to the Department regarding mock-up fabrication requirements. In addition, these repairs were made in manner that does	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0004	METS has provided independent verification of the welding and non-destructive testing and concurs that the welding procedure modification made by ABF/ZPMC have helped reduce the amount of defects in these welds.	In progress.	In progress.					Resolved

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		not demonstrate a procedure that is repeatable in actual production.											
103	02-Oct-07	The Contractor has allowed the fabricator to proceed with making repairs to defects found in the complete joint penetration (CJP) welds which connect the longitudinal stiffeners to Skin Plates A and B of the 114m mock-up. These indications were found using Ultrasonic Testing (UT) at lengths greater than 10% of the cumulative length of the welds. These repairs are considered unsatisfactory to the Department regarding mock-up fabrication requirements.	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0006	METS has provided independent verification of the welding and non-destructive testing and concurs that the welding procedure modification made by ABF/ZPMC have helped reduce the amount of defects in these welds.	In progress.	In progress.					Resolved
105	11-Oct-07	The Contractor has allowed the fabricator to proceed with making repairs to defects found in the complete joint penetration (CJP) welds connecting the longitudinal stiffeners to Skin Plate E of the 114m mock-up. These indications were found using Ultrasonic Testing (UT) at lengths greater than 10% of the cumulative length of the welds. These repairs are considered unsatifactory to the Department regarding mock-up fabrication requirements.	E-L01-SG1.055	Shanghai, China	ZPMC-0008	METS has provided independent verification of the welding and non-destructive testing and concurs that the welding procedure modification made by ABF/ZPMC have helped reduce the amount of defects in these welds.	ABF-NPR-000004R00; Issued to Contractor: NCT -0070. In progress.	In progress.					Resolved
119	13-Feb-08	ABF allowed ZPMC to proceed with drilling operations for the bolt connection splices of the upper and lower segments of the 114-m mock-up before correcting the misalignment between the side "D" skin plates. The misalignment is approximately 5 mm and exceeds the tolerances allowed in the specifications. AWS D1.5 (2002), Section 3.5.1.14, "Mechanically connected joints and splices of main stress carrying members with surfaces intended to be parallel planes shall be nearly parallel after connection, and the surfaces to be in contact shall have an offset no greater than 2 mm after all filler plates have been added, if any."	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0057	Team China has requested the Contractor respond to the NCR regarding this issue. To date, Team China has not received a response and the Contractor has proceeded with bolting the internal and external splice plates on the 114-m mock-up. However, per discussions with the ABF shop personnel, ABF has indicated that the skin plate misalignment on face "D" was "corrected" and is now only 1.5mm after the mock-up splice plates were bolted together. Team China will not be able to verify the misalignment has been corrected until the two shafts of the 114-m mock-up have been seperated and can be rechecked.	ABF-NPR-000021R00; Issued to Contractor: NCT -0030.	In progress					Resolved
132	18-Feb-08	ABF allowed ZPMC to weld Skin Plate 'D' to 'E' with an excessive root opening measuring 4.2mm. Drawing MU-WDT-07 Weld Joint Detail MWT92 shows 0 mm root opening on this non-standard joint design and AWS D1.5 2002 Figure 2.4 only gives a +2/-0mm tolerance.		Changxing Island, Shanghai, PRC	ZPMC-0051	Team China should discuss this issue with the Contractor in order to remind them of the importance of adhering to a Welding Procedure Specification (WPS). Since the joint is a Complete Joint Penetration (CJP) weld and the root pass is backgouged, if the Contractor's Ultrasonic Testing (UT) renders acceptable results, METS recommends the weld be accepted as is. Additionally, at this time it appears that this issue is an isolated occurrence; however, should this issue become a systemic problem, then METS will elevate this to a Second Tier Issue.		None					Resolved
137	21-Feb-08	ABF/ZPMC used a 10 ton hydraulic jack to aid in the fit-up of internal bolt connection plates on Skin D. The plates were 6mm out of alignment between the internal bolted connection plate and interior longitudinal stiffener prior to utilizing a 10 ton jack. The misalignment is not in conformance with the Special Provisions which states "The misalignment of longitudinal stiffeners at bolted splices shall not exceed 4mm". Furthermore, METS has mentioned to the Contractor on multiple occasions that the use of jacks is not a step in the ABF/ZPMC approved fabrication plan. Fabrication plans for the mockup must be approved per Special Provisions, Section 10-1.59 "Steel Structures", "Fabrication/Erection Procedure Mock-Ups".	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0074	After discussing the issue with the Design Team, METS understands that the specifications require the Contractor to fabricate the splices of the longitudinal stiffeners with 4mm or less of misalignment between the internal connection plate and the longitudinal stiffener. Furthermore, the Design Team indicated that any jacking of these stiffeners to correct for misalignement is not acceptable and that shim plates are to be used to correct for the misalignment. With this understanding, the Contractor has not fabricated this portion of the 114-m Mock-Up in accordance with the contract specifications. The use of shims to correct misalignment has been discussed with the ABF during mulitiple Tower Team meetings at Pier 7 and ABF has indicated they understand that using jacks on the stiffeners in production will not be allowed.	Issued to Contractor: NCT-0044. Waiting on final NCR response from ABF/ZPMC to resolve.	The specifications require the Contractor to fabricate the splices of the longitudinal stiffeners with 4mm or less of misalignment between the internal connection plate and the longitudinal stiffener. No jacking of these stiffeners to correct for misalignement is acceptable. If there is misalignment, then shim plates should be used to correct for the misalignment.					Resolved
141	19-Mar-08	ABF/ZPMC has deviated from the approved Partial Mockup Fabrication Procedure on the 89m mockup twice since its approval. The first instance occurred on 19-MAR-08 where the Contractor was approved to "remove the fit lugs connecting ONE diaphragm with the longitudinal stiffeners on Skin B" as required by the procedure. Instead the Contractor elected to remove the fit lugs connecting both diaphragms with the longitudinal stiffeners on Skin B and Skin C. The second instance occurred on 26-MAR-08 where ABF allowed ZPMC to weld fit lugs to the Skin B longitudinal stiffeners and the SA13 diaphragm plate on the 89-meter mockup outside the provisions of the approved Partial Mock-Up Fabrication Procedure and Welding Sequence.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0089	It is apparent that ABF/ZPMC have recently struggled in following the approved fabrication plans due to their desire to finish the Mock-Ups and move on to production. This will escalate in an larger issue in production if the Contractor and the Department are spending a great deal of time trying to resolve issues where the Contractor will not follow the approved plan due to their need to meet schedule requirements. The partial mock-up fabrication procedure was not successful and the Contractor will be required to perform another one. No further action regarding this issue is required at this time.	ABF-NPR-000032R00 (24-Jul-2008). Issued to Contractor: NCT-0057. Will be resolved upon completion of the 89-m partial mock-up where the Contractor has been asked to weld additional fit-lug welds using an approved procedure.	None					Resolved
142	21-Mar-08	ABF has allowed ZPMC to utilize active force while heat straightening (HS) diaphragm plates observed on 19-	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0090;ZPMC-0123	ZPMC acknowledges this problem and has informed the worker teams and QC inspectors	ABF-NPR-000069R00, ABF-NPR-000098R00; Issued to Contractor: NCT-0058; NCT-0103.	None					Resolved

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		MAR-08, 20-MAR-08, and 25-APR-08. The manner in which the ABF/ZPMC used the counter weights is not an acceptable practice and was not included as part of the ABF/ZPMC approved Distortion Control Plan or Heat Straightening Reports.				that using active force is forbidden during heat straightening. If necessary, ZPMC will submit a heat straightening report for engineer's approval. ZPMC has submitted HSRs indicating that the affected components have acceptable dimensions post heat straightening and they have since been jointly green tagged by ABF, ZPMC, and the Department.							
143	27-Mar-08	Multiple ABF/ZPMC Quality Control (QC) Inspectors were observed in the months of March and April 2008 using unapproved procedures while performing Ultrasonic Testing on welds for the Tower diaphragm plates, skin plates, and corner splice plates. During the UT inspection high amplitude ultrasonic signals were observed when scanning the weld toe areas. The QA inspector observed that the UT signals were "finger dampened" in order to decrease the amplitude of the signals; however, this technique is not permitted by the Special Provisions.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0098;ZPMC-0103;ZPMC-0104	This issue has been elevated to a Second Tier Issue as the ABF/ZPMC have been warned mulitiple times by the METS inspection staff that this practice is not acceptable and METS Team China has documented four (4) instances. METS Engineers have discussed this with the ABF QC Inspectors on mutiple occasions and elevated the issue the ABF Quality Control Manager. If this continues, METS intends to issue an NCR to document the fact that the ABF QCM is not working to resolve the issue. METS has not recorded an further issues with finger dampening since the 09-APR-08 NCR.	ABF-NPR-000114R00; ABF-NPR-000112R00; ABF-NPR-000113R00.Issued to Contractor: NCT-0077; NCT-0083; NCT-0085. Waiting on final NCR response from ABF/ZPMC to resolve.	None					Resolved
144	26-Mar-08	ABF allowed ZPMC to weld fit lugs to the Skin B longitudinal stiffeners and the SA13 diaphragm plate on the 89-meter mockup outside the provisions of the approved Partial Mock-Up Fabrication Procedure and Welding Sequence.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0097		ABF-NPR-000097R00; Issued to Contractor: NCT-0076. This issue was added to another on the log. See BTL Item #141.	This issue was added to another on the log. See BTL Item #141.					Resolved
146	02-Apr-08	The ZPMC Quality Control (QC) Inspector was observed using unapproved procedures while performing Ultrasonic Testing on the Complete Joint Penetration (CJP) on interior corner splice plate, piece MUC-116, for the 114m Mockup. During the UT inspection high amplitude ultrasonic signals were observed when scanning the weld toe areas. The QC inspector observed that the UT signals were "finger dampened" in order to decrease the amplitude of the signals, this technique is not allowed by the Special Provisions.		Changxing Island, Shanghai, PRC	ZPMC-0100	This item was added to BTL #143 and will be resolved when BTL #143 is closed.	ABF-NPR-000102R00; Issued to Contractor: NCT-0079. See BTL #143	See BTL #143					Resolved
149	13-Jun-08	As agreed during the Tower Fabrication Workshop at ZPMC on 28-29 May, 2008, the Contractor was to complete a partial mock-up of the Longitudinal Stiffener to Skin Plate connection. This mock-up was necessary since the macro-etch samples revealed that the Contractor did not meet the required weld size for the PJP connection. While performing the partial mock-up in early June 2008, the Contractor found their PJP welds to contain underfill and thus additional weld passes to correct the issue. These additional weld passes caused the stiffener to be tilted 25mm from the vertical position. ABF requested to leave the stiffener as is; however, Team China stated the mock-up shall be performed as it would be in production and should meet the final tolerances listed in the Special Provisions.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0136	In order to correct the issue, the Contractor allowed ZPMC to perform heat straightening the 70mm stiffener plate of the Stiffener to Skin Partial Mockup (PMU77-01) without the Engineer's approval. In order to get the stiffener within tolerence, ZPMC proceeded to use hand held torches and two bottle jacks, to apply active force, and push the stiffener into alignment. This procedure was not approved by the Engineer not is it a procedure ZPMC plans to use in production. As agreed during the Blue Tag Issues Meeting on 17-JUN-08, the Partial Mock-Up was intended to verify weld size and quality. Thus, provided that the welds meet the required size and quality, then the Department will approve the Partial Mock-Up. However, during production ABF/ZPMC will be required to follow their approved fabrication procedure; without unapproved deviations.	ABF-NPR-000070R00; Issued to Contractor: NCT-0119. Construction concured and stated	None at this time.					Resolved
156	21-Aug-08	ABF allowed to ZPMC to ship a total of ten (10) Tower Double Diaphragms (ESD1-47.6m, ESD1-28m, SSD1-43m, ESD1-23m, ESD1-43m, ESD1-38m, ESD1-33m, SSD1-38m, SSD1-47.6m and SSD1-23m) for machining before fabrication and inspection/testing were completed; this was not in accordance with their approved fabrication plan. The first five were shipped on 17-Aug-2008 and the second five were shipped the week of 02-SEP-2008. ABF/ZPMC shipped two (2) Tower Double Diaphragms (SSD1-28m and SSD1-33m) for machining, with fabrication and testing not completed. The aforementioned double diaphragms were not accepted by ABF Quality Control (QC) at time of shipping to Nantong due to weld discontinuities in need of repair, required nondestructive testing not completed and weld terminations not acceptable to project specifications.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0159;ZPMC-0164;ZPMC-0178	The noted double diaphragms assemblies were not accepted by ABF Quality Control (QC) personnel prior to shipping due to required nondestructive testing not completed, weld discontinuities in need of repair, heat straightening not completed, and weld terminations were not found to be acceptable to project specifications. Team China METS contacted ABF personnel prior to the shipment and also on the day of shipment to encourage the Contractor to perform the repairs before the machining is performed. METS noted that any repairs made to these diaphragm assemblies after machining may negatively affect the final geometry of the Tower Shaft in localized areas. ABF agreed that the Department's concerns were valid, but stated they could not prevent ZPMC from shipping the material. As of 07-Oct-08, all diaphragms for Lift 1 South Shaft and East Shaft were returned to Changxing Island. ABF/ZPMC indicated they would perform measurements to the double diaphragms after repairs were completed to ensure that the machined edges were not negatively affected.	ABF-NPR-000179R00. Issued to Contractor: NCT-0148; NCT-0154; NCT-0171. Concurs that machining the double diaphragms before completing the repairs is not in accordance with the approved fabrication plan and is concerned that the diaphragms will not meet final tolerances after ZPMC completes the required repairs.	Concurs with Construction and METS.					Resolved

Filter ((Cat='Major Issues' OR Cat='Second-Tier Issues' OR Cat='Quality Management Issues') AND Location like '%shanghai%' AND (status='Pending' OR status='Briefing' OR status='Resolved' OR status='Void'))

Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
						Although ABF/ZPMC have verbally informed the Department that no negative affects were measured from the welding, Team China has not received this information as of December 08, 2008. As of 11-Feb-09, all diaphragms have been jointly green tagged by the Department, ABF, and ZPMC. ZPMC understands that all NDT and repairs must be performed prior to machining.							
168	19-Oct-08	For South Tower, two locations in Skin Plate E, as a result of fit up to the wrong reference line the doubler plate to skin plate weld has fillet size of 6mm as opposed to 10mm required. This condition also exists at various locations on Lift 1, South Tower, Skin Plate A, East Tower, Skins A and E.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0182;ABF-RFI-001539R00	Following discussion with Construction it is concluded that the proposed undersize weld is not acceptable and that the Contractor shall submit a repair procedure that provides an equivalent weld size to the original detail for review and approval by the Engineer. The portions of the 5mm fillet weld which are in place within 50 mm of the centerline of the diaphragm may be left in place with a 2.5 to 1 taper to transition between weld sizes. The PJP weld detail submitted in FCN 113A is a suitable substitute where the 8mm fillet in the original design cannot be achieved.	Refer to Proposed Resolution.	The PJP weld detail submitted in FCN 113A is a suitable substitute where the 8mm fillet in the original design cannot be achieved.				S60	Resolved
170	15-Oct-08	ABF/ZPMC did not follow the approved fabrication plan for welding stiffeners to skin when welding stiffener E3, to Skin E of the East shaft. Plate p708 of stiffener E3 was not welded when the other stiffeners were welded to Skin E. The approved fabrication plan shows that all stiffener to skin welds will be complete with welding and NDT before fit-up of the Skin E to Skin A.		Changxing Island, Shanghai, PRC	ZPMC-0181	Longitudinal stiffener (p708) of East Skin E was left un-welded to allow for fit up. It was found that after fit up the stiffener is not weldable. For future Skin E production this stiffener will be welded ahead of assembly to fix this problem. However for this skin the following procedure is proposed: (See sketch attached for details) - The existing stiffener will be cut through the existing butt weld of p223 and p708 and removed through a cope cut into the temporary diaphragm. The stiffener will be then scrapped. - A 75mm rat hole will be added to p223 and the new p708 to allow for butt welding. The butt weld detail will remain the same. - A new p708 will be fabricated with a 75mm rat hole at the butt splice and a one sided bevel with stay in place backing. The one sided bevel with stay in place backing is required due to reduced welding clearances. - Distortion will be controlled by using jacks to restrain the stiffener, and welding the cope pjp prior to removing the jacks. The weld detail will also be transition to a balanced weld where access is available. The weld repair has been successfully completed and the skin plate has been jointly green tagged by the Department, ABF, and ZPMC. ***** This issue will not be briefed at future meetings ********	ABF-NPR-000175R00 (accepted by CalTrans, Doug Wright, 05-Nov-2008);Issued to Contractor (NCT-0174). The Contractor's proposed repair procedure is acceptable. In accordance with WDC discussions held in China, a cover plate will be welded in place over the cope hole cut in the temporary diaphragm as shown on the attached detail. The Department concurs with the Contractor's decision to weld the future Skin E stiffeners ahead of assembly. In the future, any change to the approved repair procedure shall be submitted to the Engineer for review and approval prior to commencing work.						Resolved
171	18-Nov-08	ABF/ZPMC has built up the base metal at the ends of the stiffeners and the skin plates on both East and South shafts in excess of 20mm. Weld build up "greater than twice the thickness of the thinner part or 20 mm [3/4 in.], whichever is less" must be approved by the Engineer. This condition exists on all the stiffeners of all skin plates and the ends of the skin plates of the East and South shafts of Lift 1.		Changxing Island, Shanghai, PRC	ZPMC-0190	Perform hardness testing and 100% UT & MT on welds in question. Only subject to satifactory results of the hardness testing and NDT the weld can be considered to be acceptable.	Issued to Contractor (NCT-0184) Construction and METS recommend 100% UT & MT and hardness testing to ensure that the weld build up is sound.					S60	Resolved
212	18-Feb-08	ABF allowed ZPMC to move the 114m tower mock-up prior to performing the required postweld heat treatment of a critical weld repair. At the completion of welding of the skin plate critical weld repair the required minimum preheat and interpass temperature of 200º C was measured at approximately 138 °C before the critical weld repair was raised to the hydrogen diffusion postweld heat treatment (PWHT). There was an approximate forty minute lapse between the time the CWR was completed until the time the post heat temperature was applied and achieved.		Changxing Island, Shanghai, PRC	ZPMC-0055	The weld has been inspected and passed NDT evaluation to ensure that cracks had not been formed due to the improper hydrogen diffusion postheat process. ZPMC internal NCR-CT-018 has been issued to ensure that critical repair work will be monitored more thoroughly in the future. The associated NCR has been resolved.	ZPMC will improve monitoring of critical repair work in accordance with ZPMC internal NCR-CT-018.					S60	Resolved
213	02-Sep-09	In August/September, 2009, weld over-checks were performed on various Tower Shaft welds to verify that the welds were not subject to hydrogen embrittlement related delayed cracking. Over-checks have been performed by both METS and ABF on Lifts 1 and 2 Shafts to determine the nature of the indications and to establish the cause of the defects and the remedial measures, and the precautionary measures to prevent recurrence.		Changxing Island, Shanghai, PRC	;ZPMC-0371;ZPMC-0372;ZPMC-0373	Refer to METS Discussion area for Proposed Resolution.	Issued to Contractor NCR-ZPMC 0371, 0372, 0373.					S60	Resolved
236	18-Jan-10	Cold bending strut web plate		Changxing Island, Shanghai, P.R. China	ZPMC-0611								Void

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Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
241	09-Jan-10	Welding was performed with insufficient preheat temperature on Skin E (Lift 5, South Tower)		Changxing Island, Shanghai, P.R. China	ZPMC-0588								Void
256	06-Apr-10	Caltrans inspectors discovered, during the QA inspection of Anchor Bolt to Bearing Stiffener distance measurement at West Shaft Skin E, external side, that 4mm gap found between the Type 2 Bearing Stiffener and Base Plate.		Changxing Island, Shanghai, PRC	ZPMC-0708	As per contractor's response to NCR-ZPMC-708, the gaps are to be shimmed, and offered to Caltrans inspection and approval. The Contractor also has to establish the probable cause of the non-conformance to address the quality control procedure, and take measures to avoid future re-occurrence.	MET/Construction considers the proposed measure acceptable. Contractor is also requested to address the cause of the non- conformance the quality control. Procedure and take the necessary measure to avoid similar incidents occur in future.	See Construction comments.				S60	Pending
261	28-May-10	At West Tower Shaft, due to weld distortion, Type 2 Bearing Stiffeners overlap the anchor bolt holes at five (5) locations along skin D, exterior. The overlap measures 2-4mm.		Changxing Island, Shanghai, P.R. China	ZPMC-0710	Contractor to submit survey data of the distortion for Engineering's Review. Subject to results meeting the requirements i.e. not conflicting the anchor bolts, the stiffeners can be considered as "Fit for Purpose." Proper distortion control shall be applied to other shafts to avoid occurrence of similar incidents.						S60	Resolved
263	16-Jun-10	Contractor's documentation and welding reports do not comply with the requirements of the Special Provisions and CCO#077 Quality Assurance Database. The finalized assessment in adherence to the contract requirements for Welding Reports and Green Tagging procedures will be maintained for each Tower Voyage Shipment through out the duration of the project.		Changxing Island, Shanghai, China		State Letter 05.03.08-000037 was issued on June 28, 2010 confirming that work will continue on welding database (CCO 77) until Voyage 3 Shipment arrives in Oakland at which time a percentage complete for Tower Lift 1 portions of the database will be determined. Subsequent to arrival, work will continue on welding database until its completion. State Letter 05.03.08-000039 was issued on September 23, 2010 confirming that work will continue on welding database (CCO 77) until Voyage 6 Shipment arrives in Oakland at which time a percentage complete for Tower Lift 3 portions of the database will be determined. Subsequent to arrival, work will continue on welding database until its completion State Letter 05.03.08-000040 was issued on November 19, 2010 confirming that work will continue on welding database (CCO 77) until Voyage 6 Shipment arrives in Oakland at which time a percentage complete for Tower Lift 3 portions of the database will be determined. Subsequent to arrival, work will continue on welding database until its completion. State Letter 05.03.08-000042 was issued on February 1, 2011 confirming that work will continue on welding database (CCO 77) until Voyage 7 Shipment arrives in Oakland at which time a percentage complete for Tower Lifts 4 and 5 portions of the database will be determined. Subsequent to arrival, work will continue on welding database until its completion. State Letter 05.03.08-000044 was issued on May 18, 2011 confirming that work will continue on welding database (CCO 77) until Voyage 8 Shipment arrives in Oakland at which time a percentage complete for Tower Lifts 6 portions of the database will be determined. Subsequent to arrival, work will continue on welding database until its completion.	Concurs with METS.		77				Pending
264	27-Jan-11	Report is to document RFI revisions regarding Quality Management, Minor Repairs, Works Modification, and Shop Drawing Revisions for each Tower Shipment. Brief description of RFIs will be provided under METS Discussion area.		Shanghai, Changxing Island (PRC)	ABF-RFI-001140R00;ABF-RFI-001353R01;ABF-RFI-001493R00;ABF-RFI-001502R00;ABF-RFI-001540R00;ABF-RFI-001929R00;ABF-RFI-001936R00;ABF-RFI-001983R00;ABF-RFI-002110R00;ZPMC-0929	Detailed resolution of RFIs, TC-RFIs are provided in PMIV. Report is to document these known agreed upon changes by Construction, Design and METS.	Minor Repairs, Shop Drawing Revisions will be shown on the As-builts. Quality Management will be noted in "Memo to File" for the project.						Pending
265		Tower Shipment No. 1 Punchlist signed by both the Department and ABFJV on June 28th, 2010 notes sixty-two (62) "Category D" items are to be completed Stateside in Oakland. Reference the METS Discussion area of this report for a summary of these items.		Changxing Island, Shanghai, China		Documented repairs and inspection of items listed will commence in Oakland. Please reference the "Tower Outstanding Punch List Shipment No.1" for further details. This combined punchlist is issued with State Letter 05.03.08-000037. Letter confirms the Department and ABF are in agreement with the 62 items listed in the Punchlist.							Pending

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Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
266	19-Jul-10	During vertical trial assembly of Lift 2/Lift 3 tower shafts it was observed that there were mis-alignments and also excessive gaps between longitudinal stiffeners and interior splice plates at a number of locations. 1.South shaft -i)Mis-alignments of 5mm, 7mm and 10mm resp.(tolerance 4mm)between Lift 2 longitudinal stiffeners and splice plate at three locations on skin C, -ii)Gap of 14.5mm(0-10mm between tolerance)between Lift 3 longitudinal stiffener and splice plate at one location, skin E. 2.West shaft -i)Mis-alignment of 6mm at one location on skin C, and 5mm at one location on skin D ,between Lift 2 longitudinal stiffener and splice plate -ii)Gap of 11.5mm between Lift 3 longitudinal stiffener and splice plate at one location, skin E.		Changsing Island, Shanghai, P.R. China	ABF-RFI-001493R00;ABF-RFI-	1.South shaft- Contractor to carry out retrofit i.e shimming as per RFI 1888. Subject to inspection and acceptance by METS/Construction in trial assembly and finally in erection the component can be considered as 'fit for purpose'. 2.West shaft- Contractor to carry out retrofit i.e shimming as per RFI 1888. Subject to inspection and acceptance by METS/Construction in trial assembly and finally in erection the component can be considered as 'fit for purpose'.							Pending
267	05-Jul-10	Report is to document issues related to Material Changes / Substitutions from the RFIs for Tower Shipments. Brief description of RFIs will be provided under METS Discussion area. Log of RFIs will be updated throughout the project.		Changxing Island,Shanghai, P.R. Cchina	ABF-RFI-000557R00;ABF-RFI-000638R00;ABF-RFI-000750R00;ABF-RFI-001648R00;ABF-RFI-001762R00;ABF-RFI-001858R00;ABF-RFI-001988R00;ABF-RFI-000427R00;ABF-RFI-	Detailed resolution of RFIs, TC-RFIs are provided in PMIV. Report is to document these known agreed upon changes by Construction, Design and METS.	Minor Repairs, Shop Drawing Revisions will be shown on the As-builts. Quality Management will be noted in "Memo to File" for the project.						Pending
270	13-Aug-10	ZPMC has incorrectly drilled bolt holes for strut facade connection on Face E, West Shaft at 53m level. RFI 1961 was issued with a proposed retrofit.		Changxing Island, Shanghai, P.R. China		METS concurs with Design/Construction's comments and takes no exception of ABF's proposed resolution given in RFI 1961 Rev 1 and TC-RFI 103R0.	Concurs with METS.						Pending
273	28-Sep-10	Report is to document all the incidence related to over stick out of threads for bolted connections on the Tower structure. Detailed description of individual incidence will be provided under METS Discussion area.		Shanghai, China		• Lift 2- Contractor has confirmed, verified by CT's QA representatives, that the bolted connections in question have been completed in accordance with the requirements as specified in the East End Global tolerance meeting dated 9/15/10.							Pending
276	05-Nov-10	During vertical trial assembly of Lift 3/Lift 4 tower shafts it was observed that there were misalignments between longitudinal stiffeners and interior splice plates at the East, West and North Shafts.		Changxing Island, Shanghai, P.R. China		Retrofit work as per RFI 1888, i.e introduction of shim plates and additional reinforcement plates as appropriate.							Pending
277	28-Jan-11	1.During the Caltrans Quality Assurance (QA) in-process observation on East and West Lift-5 saddle grillages, the backing bars on a number of CJP welds were observed to be non-compliant with AWS D1.5 requirements i.e non-fusion and buckling. The backing on one weld joint in East grillage was found to have been removed.		Changxing Island, Shanghai, P.R. China	ZPMC-0850;ZPMC-0839	As per requirements referenced in RFI 2099R0, ZPMC attempted to rectify the welds WSD1-TL5-4B/F#07,36 and WSD1-TL5-4B/F#4 but the results have not been accepted by QA. No repairs have been performed to the other welds identified in NCR ZPMC-0839. Contractor explained that further repairs were not practicable due to the limited access. Construction/Design/METS concluded that under the circumstances the rectification can be considered as fit-for-purpose subject to the welds meet the Contract's acceptance criteria to be re-confirmed by NDT. ZPMC performed NDT on all the welds identified to confirm that they are all acceptable.	In view of the access restrictions and to facilitate the fabrication, Construction/Design, with METS's confirmation of Contractor's NDT results accepted that the welds in question are Fit-for-purpose and accepted that both NCR's ZPMC-0839 and 0850 can be closed out.						Resolved
Quality Management													
104	08-Oct-07	The Contractor has allowed the Fabricator to proceed with performing a third time repair (CWR) without notification or approval from the Engineer. Although this is the first occurence of this issue during the Tower Mock-Up Fabrication, should it continue, it will not allow the Department the time or information to analyze and help resolve issues where the Contractor is having to make multiple repairs to a weld.	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0009	This issue occurred in early OCT and appears to not be a systemic issue at this time. The Contractor is aware of the NCR and appears to understand what is expected as no further NCR's have been issued for similar occurrences in more than a month. ZPMC has generated an internal NCR addressing this issue. ZPMC has since generated a CWR form and notified production and QC personnel of the requirements for CWR and engineer approval for 3rd time repairs.	ABF-NPR-000010R00; Issued to Contractor (NCT -0071). Construction concurs with METS.	Not applicable.					Resolved
112	10-Jan-08	ABF allowed ZPMC to weld using four (4) welders that were not qualified or approved by Caltrans. AWS D1.5 (2002) Section 5.22 requires welders to pass a qualification tests and the Special Provisions, Section 8-3.01 requires the Contractor to submit these welder qualifications for approval by the Engineer before working on production material. ZPMC welded filler passes with the shielded metal arc welding (SMAW) process on partial joint penetration weld joints # 1 through # 4 at the	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0019	ZPMC has submitted a log of qualified welders indicating that Feng Hua Jun (ID #066258), Wang Jian (ID #067081), Zhang Wei (ID #066413), and Li Zai Jun (ID #037996) have passed the welder qualification test in the vertical (3G) position. In accordance with AWS D1.5 2002, Section 5.22, the qualification test in the 3G position qualifies a welder to weld in 1G, 2G, 3G, 1F, 2F, & 3F positions.	ABF-NPR-000078R01; Issued to Contractor (NCT -0005). Concurs with METS.	None					Resolved

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		junction of the Skin E (MUSB-MA38) to the doubler plate SA215 on the Tower 89-m mock-up.											
113	10-Jan-08	ABF has allowed ZPMC to utilize TL-508 (E-7018) electrodes that do not appear to have been dried prior to storage. The Contractor was not able to show evidence, documented or otherwise, that indicates that the electrodes have been properly dried prior to being stored within the holding oven. Additionally, numerous times the storage ovens have been found to be below the required temperature range per AWS D1.5-2002 and/or the manufacturer's written drying instructions of 100-150 degrees Centigrade.	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0020	METS has discussed this issue with the Contractor and has continually monitored the oven temperature since the date of occurrence. At this time, it appears that this is an isolated incident and the Contractor has corrected their electrode storage issue. If this reoccurs during the production, additional action may be necessary; however, since this occurred on a mock-up, additional action, such as removal of the welds, may not be necessary. ZPMC has since submitted a welding consumable storage record as evidence of filler metal control. This record indicates that the electrodes have a preservation drying temperature of 130 degrees Centigrade, which is in compliance with AWS D1.5-2002, Section 4.5.2 and the manufacturer's written drying instructions.	ABF-NPR-000079R01; Issued to Contractor (NCT-0006). Concurs with METS.	None					Resolved
114	10-Jan-08	ABF has allowed ZPMC to utilize a Welding Consumables Usage Records that are written in Chinese characters. As required in the Special Provisions and per the ZPMC WQCP Rev.0, all consumable usage shall be recorded on the approved Caltrans Welding Consumable Usage Record (# R787-QCP-801) which is written in English.		Changxing Island, Shanghai, China	ZPMC-0021	ABF/ZPMC understands that these records must be submitted in English. ZPMC has submitted welding consumable storage records in English, in response to NCR-ZPMC-0020 and NCR-ZPMC-0022.	Concurs with METS.	None					Resolved
115	10-Jan-08	ABF has allowed ZPMC to weld with SMAW TL-508 (E-7018) electrodes that were not issued from hermetically sealed containers and the Contractor did not have any documented evidence that the electrodes were dried in accordance with AWS D1.5-2002, Section 4.5.2. Section 4.5.2 requires that "all electrodes having low hydrogen coverings conforming to AWS 5.1 shall be purchased in hermetically sealed containers or shall be dried in conformance with the manufacturer's written drying instructions.	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0022	ZPMC has submitted a welding consumable storage record as evidence of filler metal control. This record indicates that the electrodes have a preservation drying temperature of 130 degrees Centigrade, which is in compliance with AWS D1.5-2002, Section 4.5.2.	ABF-NPR-000080R01; Issued to Contractor (NCT-0007). Concurs with METS.	None					Resolved
117	06-Feb-08	ABF has allowed ZPMC to proceed with depositing weld metal after not properly cleaning of welds on the Tower 89-m mock-up. The affected welds were observed by METS Quality Assurance inspector on MUSB-MA22-Skin D (weld numbers MUSB-MA22 B/B-13 thru 20) connection plate attachment welds.		Changxing Island, Shanghai, PRC	ZPMC-0046	Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.	Concurs with METS.	None					Resolved
118	06-Feb-08	ABF has allowed ZPMC to exceed the maximum inner pass temperatures (listed on the approved WPS) while welding weld joint #MUB-MA21 B/J-1 of the 89-m mock-up. This was observed by METS Quality Assurance Inspectors using a 232-degree Centigrade Tempilstik Temperature Indicator (which melted) and 316-degree Centigrade Tempilstik Temperature Indicator (which did not melt).		Changxing Island, Shanghai, PRC	ZPMC-0047	METS has discussed this issue with the Contractor's Quality Control Inspector and as of 17-FEB-08 it appears to have been an isolated incident. Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.	Concurs with METS	None					Resolved
120	13-Feb-08	ABF/ZPMC QC failed to detect a "Class A" indication on complete joint penetration weld located at the skin plate A and B connection of the 114 meter Tower mockup. ABF/ZPMC accepted the weld but later confirmed the presence of the indication.		Changxing Island, Shanghai, China	ZPMC-0058	METS notified the Quality Control Inspector of the rejectable indication and on 03-FEB-08 the QC Inspector reexamined the area and also agreed the presence of the rejectable indication. Fabrication procedure has been modified and the 114m mock-up has been fabricated successfully. Letter No. 05.03.01-003242 concluded the successful completion of the 114m mock-up on January 7, 2009.	Concurs with METS.	None					Resolved
121	13-Feb-08	ABF allowed ZPMC to repair a crack in the root pass of a complete joint penetration weld in diaphragm p213, weld joint #63, of the Tower 89-m mock-up without notifying the Engineer. Special Provisions, Section 8-3.01 states, "The Engineer shall be notified immediately in writing when welding problems, deficiencies, base metal repairs, or any other type of repairs not submitted in the WQCP are discovered and also of the proposed repair procedures to correct them."	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0059	METS has discussed the issue with the Contractor on numerous occasions and stressed the importance of receiving approval from the Engineer prior to proceeding with Critical Weld Repairs. The Contrator has agreed this is a contractual requirement and has stated they will comply. Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.	ABF-NPR-000022R00; Issued to Contractor (NCT-0031). Concurs with METS.	None					Resolved
122	13-Feb-08	ABF/ZPMC performed the incorrect UT scanning procedure on the Skin A to Skin B corner joint on the 114m Mockup. The joint is detailed as a butt joint on the drawings but ABF/ZPMC used the scanning procedure for a corner joint. Testing shall be done in accordance with AWS D1.5 (2002), Section 6; "Testing Procedures", Subsection 6.19.6.1: "The Testing angle and scanning procedure shall be in conformance with those shown in Table 6.2" and AWS D1.5 (2002), Section 6; "Testing	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0060	ZPMC has generated an internal NCR regading the incorrect scanning procedure used on the corner joint. Fabrication procedure has been modified and the 114m mock-up has been fabricated successfully. Letter No. 05.03.01-003242 concluded the successful completion of the 114m mock-up on January 7, 2009.	ABF-NPR-000023R00; Issued to Contractor (NCT-0032).	None					Resolved

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		Procedures", Table 6.2, "Testing Angle".											
123	13-Feb-08	ABF/ZPMC manually drilled full size bolt holes on skin plates A and E of the 114m mockup without using a template with hardened bushings as required by the Standard Specifications, Section 55,Subsection. 55.3.14A (2) which states: "Drilling full size shall be done with the parts assembled or to a steel template with hardened bushings or may be performed with gang drill equipment if approved by the Engineer." ZPMC drilled the bolt holes utilizing a template with hardened bushings to a depth of 5-10 mm into the skin plates, then the template was removed and the remaining depth of the holes were drilled without a template.	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0061	METS has made random inspections of the bolt holes in the 114-m Skin plates and has found that removing the template has not adversely affected the drilling of the holes. Fabrication procedure has been modified and the 114m mock-up has been fabricated successfully. Letter No. 05.03.01-003242 concluded the successful completion of the 114m mock-up on January 7, 2009.	In progress	In progress					Resolved
124	13-Feb-08	ABF/ZPMC did not maintain the proper preheat, in accordance with the approved WPS, at two locations on the 89m mockup. The required preheat temperature according to the WPS is 180°C, the observed during temperature at the two locations was 160°C. As specified in AWS D1.5, 2002, Section 12.14, "Preheat and Interpass Temperature Control": "The minimum preheat and interpass temperature for AASHTO M270M (M270) Grade 250 (36),345 (50), 345W (50W), and 485W (70W) (ASTM A 709M (A 709) Grade 250 [36], 345 [50], 345W [5OW],and 485W [7OW]) steels shall be as described in Tables 12.3 and 12.4.	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0062	Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.	ABF-NPR-000024R00; NCT-0033; Concurs with METS.	None					Resolved
125	13-Feb-08	American Bridge/Flour has allowed ZPMC to fit-up two corner stiffener splice plates of the 114-m Mock-Up (MUSB-SA194 and MUSB-SA184) with the following two discrepancies: 1) Non-continuous steel backing bar. AWS D1.5 2002 section 3.13.2: “Groove welds made with the use of steel backing shall have the weld metal thoroughly fused with the backing. Steel backing shall be continuous the full length of each weld made with backing.” 2) There are externally attached tack welds on the steel backing bar that are not continuous or welded the full length of the steel backing. AWS D1.5 2002 section 3.13.3.2: Where the steel backing of longitudinal welds is externally attached to the base metal by welding, such welds shall be continuous for the full length of the backing	E-L01-SG1.055	Changxing Island, Shanghai, China	ZPMC-0063	Fabrication procedure has been modified and the 114m mock-up has been fabricated successfully. Letter No. 05.03.01-003242 concluded the successful completion of the 114m mock-up on January 7, 2009.	ABF-NPR-000025R00; NCT-0034; In progress	In progress					Resolved
126	15-Feb-08	1) ABF/ZPMC used five 10 ton hydraulic jacks to aid in the fit-up of four internal bolt connection plates. The plates were 2mm out of alignment but within the tolerances specified in the Special Provisions. The use of jacks is not a step in the ABF/ZPMC approved fabrication plan. Fabrication plans for the mockup must be approved per Special Provisions, Section 10-1.59 "Steel Structures", "Fabrication/Erection Procedure Mock-Ups".		Changxing Island, Shanghai, PRC	ZPMC-0065	Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.	None provided.	None					Resolved
127	15-Feb-08	ABF allowed ZPMC to cover complete joint penetration (CJP) groove welds prior to being accepted by non destructive testing on the 89-m Mock-Up. ZPMC welded two corner stiffener plates over skin plate corner CJP at skin plate B to C and at skin plate C to D. ABF/ZPMC was not able to provide QC reports which documented the ultrasonic testing of the enclosed welds. AWS D1.5-2002 Paragraph 6.20.2 requires the Contractor provide documentation of NDT testing before acceptance by the Engineer. The Contractor will not be able to perform UT examination of these welds after the welds are covered.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0066	Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.	In progress	In progress					Resolved
129	18-Feb-08	A ZPMC NDT technician was observed conducting ultrasonic testing from face "A" and "B" only and no straight beam or shear wave examination was being conducted from Face "C." The Special Provisions, Section 10-1.59, pg. 333, Item 12. "Scanning for ultrasonic examination of corner, tee and cruciform welds in thicknesses greater than 50 mm shall include base metal behind and adjacent to the welds." It was noted that after the inadquate UT procedure was performed, the ZPMC technician marked the weld as acceptable.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0048	ZPMC did not understand that there was a requirement to perform UT inspections from Face 'C' prior to this incident. After discussion with Caltrans, ZPMC understood the requirement and agreed to perform straight-beam UT inspection of all 'C' sides.	ABF-NPR-000015R00; Issued to Contractor (NCT-0011).	None					Resolved
130	18-Feb-08	ABF allowed ZPMC to use an unapproved CWI to monitor work in-progress on the 77 meter Tower mock-up. Based on the most recent list of approved Quality Control personnel, Mr. Xu Le Feng could not be identified as an approved inspector for the project.		Changxing Island, Shanghai, PRC	ZPMC-0049	ABF/ZPMC understands that only approved CWI are allowed to monitor work in-progress.	Concurs with METS	None					Resolved

Filter ((Cat='Major Issues' OR Cat='Second-Tier Issues' OR Cat='Quality Management Issues') AND Location like '%shanghai%' AND (status='Pending' OR status='Briefing' OR status='Resolved' OR status='Void'))

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131	18-Feb-08	ABF allowed ZPMC to accept by ultrasonic examination corner CJP weld joints greater than 50 mm (in thickness) but did not conduct scans for laminar tearing at the base metal behind and adjacent to the welds. As required by the Special Provisions Section 8, page 333, Item# 12, "Scanning for ultrasonic examination of corner, tee and cruciform welds in thicknesses greater than 50 mm shall include base metal behind and adjacent to the welds. Lamellar tearing discontinuities that exceed 3 mm or that lie within 10 mm of the surface shall be repaired."		Changxing Island, Shanghai, PRC	ZPMC-0050	Team China should discuss this issue with the Contractor in order to be reminded of the requirements. METS recommends the joint be examined with Ultrasonic Testing in accordance with the noted specification. Fabrication procedures have since been revised. The Department concurs with ABF that the 114m Mock-up has been successfully completed, as stated in letter 05.03.01-003242, issued on January 7, 2009.	Not submitted to contractor due to untimely notice.	None					Resolved
133	18-Feb-08	ABF allowed ZPMC to start milling operations on the tower mock up splice 114 M elevation upper and lower section without completing the ultrasonic testing inspection of the skin plate CJP groove welds at the corner connections, as shown in the ZPMC Tower Fabrication and Welding Sequence for the 114-m Mock-Up, pg FP-MUC-55, Step 19 and Special Provisions, pg 333, Item 12.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0054	Fabrication procedure has been modified and the 114m mock-up has been fabricated successfully. Letter No. 05.03.01-003242 concluded the successful completion of the 114m mock-up on January 7, 2009.		None					Resolved
136	19-Feb-08	While performing air carbon arc gouging ABF/ZPMC did not adhere to the approved Critical Weld Repair (CWR#39) procedure and AWS D1.5 (2002) when repairing a crack on the 89m mockup at weld joint MUB-MA21G/J-29. ZPMC performed air carbon arc gouging with a preheat temperature of lower than 65ºC, the QA inspector verified this using a temperature indicating stick rated to melt 65ºC which did not melt when applied to the weld area. Additionally, ABF/ZPMC did not maintain postweld heat temperature on the 89m mockup as specified in approved CWR #39 while repairing a crack at weld joint MUB-MA21G/J-29. As a result the temperature dropped below the minimum post weld temperature of 230ºC, the QA inspector verified this using a temperature indicating stick rated to melt 230ºC which did melt when applied to the weld area. ZPMC was not monitoring the postweld temperature range, 230ºC thru 315ºC, after the weld was deposited.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0072	Fabrication procedure has been modified and partial mock-ups have been fabricated successfully. Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups.	ABF-NPR-000029R00; Issued to Contractor (NCT-0042).						Resolved
147	09-Jun-08	ZPMC was observed performing Submerged Arc Welding (SAW) at the stiffener complete joint penetration (CJP) butt joint # SSD1-SA-15-A/F-15A with an interpass temperature that exceeds the maximum interpass temperature allowed by AWS D1.5 (2002) of 230° C.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0134	ZPMC has notified the CWI of this deficiency and will conduct non destructive testing to verify the soundness of the weld. ZPMC has reminded their Quality Control inspectors to monitor interpass temperature and the weld in question has since been tested using visual, magnetic particle and ultrasonic testing and found to be acceptable.	ABF-NPR-000068R00; Issued to Contractor (NCT-0116). Concurs with METS	None					Resolved
148	12-Jun-08	ZPMC inproperly used thermal cutting equipment and damaged the base metal along the edge of Skin Plate A on the South Shaft of Lift 1. ZPMC proceeded to perform the repair of base metal notches without Engineer approval on plate edges of tension and reversal-of-stress members and without performing ultrasonic testing (UT) and magnetic particle testing (MT) as required by contract documents. These notches occur at the shear link connection access holes on the South Shaft, Skin A, Lift 1.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0135	ZPMC WQCP Section 9 allows for the repair of thermal cut edges of non-SPCM parts without engineer approval; however, all necessary magnetic particle and ultrasonic inspections are required to be performed. ZPMC QA has notified the CWIs and production personnel of this issue.	ABF-NPR-000132R00; Issued to Contractor (NCT-0117)	None at this time					Resolved
150	24-Jun-08	OIW/American Tank have proceeded with tack welding without an approved Welding Procedure Specification (WPS) or approved welders on the first two rolled sections of the Hinge K Pipe Beams (SPCM material). OIW directed American Tank to proceed with the welding on 18-JUN-08 after METS had verbally requested the WPS and welder qualifications to perform and expedited review. The submission of prequalified WPS' and welder qualifications for Engineer approval are required in AWS D1.5-2002 and in the Contract Special Provisions Section 8-3.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	OIW-0002	WPS was approved in State Letter 05.03.01-002324 (ABF-SUB-000550R07) on July 3, 2008 and the welder qualifications in 05.03.01-002517 (ABF-SUB-000550R08) on August 7, 2008.	ABF-NPR-000067R00; Issued to Contractor (NCT-0123).	ABF-NPR-000067R00; Issued to Contractor (NCT-0123).					Pending
153	04-Aug-08	The contractor has allowed OIW/American Tank to weld without approved welders and without the approved as noted welding procedure specification (WPS). The roll formed Hinge K Pipe Beam fuse section / heat D4848-5B has been fit and tack welded without the approved WPS or by an approved welder.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	OIW-0005	WPS was approved in State Letter 05.03.01-002324 (ABF-SUB-000550R07) on July 3, 2008 and the welder qualifications in 05.03.01-002517 (ABF-SUB-000550R08) on August 7, 2008.	ABF-NPR-000092R00; Issued to Contractor (NCT-0137).	ABF-NPR-000092R00; Issued to Contractor (NCT-0137).					Pending
164	28-Sep-08	A 35mm linear indication was discovered during magnetic particle testing in the PJP groove weld, 43M Diaphragm plate weld number NSD1-SA27 B/B-8. ABF/ZPMC Quality Control Inspectors had previously tested and accepted the weld using magnetic particle testing and turned over the weld for Quality Assurance verification testing. Once the crack was identified the Contractor	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0179	ABF has notified ZPMC that they have violated the contract and AWS D1.5 Code requirements. ZPMC has provided Magnetic Particle Testing (MT) results indicating sound welds and the 43M Diaphragm has been green tagged. ZPMC has also provided dry Magnetic Particle Testing (MT) training to its NDT operators to prevent future	Issued to Contractor (NCT-0172).						Resolved

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		repaired the indication without approval from the Engineer as is required by the Special Provisions and AWS D1.5 2002.				occurrences, as indicated in their response to NCR-ZPMC-0187.							
165	22-Oct-08	ABF/ZPMC was welding outside the parameters of their WPS to build up the joints on the East Shaft, Skin E, Lift 1 and South Shaft, Skin C, Lift 1, Longitudinal Stiffeners. The Contractor was utilizing a weave bead technique which is outside the tolerances of the WPS-345-FCAW-3G-3F-Repair for travel speed thus modifying their Heat Input into the material. The width of the weave bead observed was approximately 50 millimeters. Below is a digital photograph illustrating the welding performed on Skin Plate C of the South Shaft, lift 1 and what was observed on the East Shaft, Skin E, (Lift 1) on 10-20-2008.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0184	Hardness testing and 100% UT & MT have been performed. The hardness testing was witnessed by the Engineer and the results found acceptable. The UT & MT results indicated sound welds and were verified by QA. The associated NCR has been resolved.	Issued to Contractor (NCT-178)					S60	Resolved
166	22-Oct-08	ZPMC was performing heat straightening operations to Internal Splice Plate ESD1-SA97 according to an ZPMC internal heat straightening request HSR(T)-205 which stated the maximum deformation was 10 millimeters. QA measured the member to be out of flatness to be approximately 14 millimeters as shown in the digital photograph below.	E-L01-SG1.055	Changxing Island, Shanghai, PRC	ZPMC-0185	ZPMC has been notified that the material thicknesses greater than 16mm has a tolerance of 3/1000 - heat straightening beyond this tolerance requires engineer approval. ESD1-SA97 has since been jointly green tagged by the Department, ABF, & ZPMC on 3/15/2009.	Issued to Contractor (NCT-0179).					S60	Resolved
167	26-Oct-08	ZPMC QC Inspectors accepted Partial Joint Penetration welds SSD1-SA180 A/E 10, 11 and 34 with linear indications (transverse and horizontal) on the South Tower Skin D longitudinal stiffener to skin welds. ZPMC QC Inspectors accepted the above mentioned welds on 10/20/08.		Changxing Island, Shanghai, PRC	ZPMC-0186	The repairs were performed within the same work shift.	Not issued to contractor.						Resolved
175	26-Dec-08	It was observed by QA that cascading of weld passes at terminations was not being performed on fit lug to diaphragm fillet welds. The proposed 15mm fit lug weld detail in ABF-SUB-000101R06 notes “Cascade and grind terminations or cascade and fill craters complete (prior to ceasing the arc on each pass).”		Changxing Island, Shanghai, PRC	ZPMC-0199	ZPMC informed ABF that the welder performing this weld was not involved in the Mock-up, thus resulting in a weld not being completed per the pre-determined fabrication procedure. The weld was not in a final condition and was subsequently ground to the proper contour and no defects detected. As a preventative measure, ABF/CT have instituted a training program for both welders and grinders. This specific case of fit lug welding and grinding is one of the training subjects. All affected welds have been repaired and green tagged. The associated NCR has been resolved.	Issued to Contractor (NCT-192)					S60	Resolved
176	04-Jan-09	It was observed by QA that ZPMC welding personnel welded East Shaft, Lift 1, Skin C, fit lug partial joint penetration welds out of sequence. The Partial Joint Penetration (PJP) weld connecting the fit-lug to the longitudinal stiffener was completed. The “dog” securing the fit-lug to diaphragm plate was removed, prior to welding the fit lug to diaphragm. The fit-lug has since lifted off the diaphragm surface.		Changxing Island, Shanghai, PRC	ZPMC-201	ZPMC applied the dogs incorrectly resulting in a condition where they could not finish the weld unless the dog was removed. As a preventative measure, ABF/CT have instituted a training program for both welders and grinders. This specific case of fit lug welding and grinding is one of the training subjects. ZPMC has been following the approved fit lug fabrication procedure and removing "dogs" only after weld completion. The affected welds have been repaired and green tagged. The associated NCR has been resolved.	Issued to Contractor (NCT-193)					S60	Resolved
177	04-Jan-09	It was observed by QA that welds had been improperly terminated at the end of Partial Joint Penetration (PJP) fit lug to diaphragm weld joints, located inside East Tower, Lift 1. ZPMC weld personnel failed to ensure that weld metal was completely deposited in a manner that would ensure a sound weld.		Changxing Island, Shanghai, PRC	ZPMC-200; ZPMC-205	ABF claims extension bars and run-off plates are not possible to be used in this case. As a preventative measure, ABF/CT have instituted a training program for both welders and grinders. This specific case of fit lug welding and grinding is one of the training subjects. All affected welds have been repaired and green tagged. The associated NCRs have been resolved.	Issued to Contractor (NCT-194)					S60	Resolved
180	04-Mar-09	ZPMC is unable to grind the interior face of the tower diaphragm 35mm rat holes, following welding the diaphragms to skin plates, due to limited access for die grinders. ABF has submitted ABF-RFI-001659R00 with two proposed details for increasing the rat hole size. Detail 1 indicates increasing the radius of the rat hole from 35mm to 60mm, while Detail 2 indicates shifting the 35mm rathole 60mm upward.		Changxing Island, Shanghai, PRC	ABF-RFI-001659R00	On 3/12/2009 and 3/17/2009, it was observed that ZPMC is capable of producing diaphragm to skin plate weld terminations that meet acceptance criteria. For the as-built condition of the unacceptable diaphragm to skin welds, it is questionable whether the approved Detail 2 in the response to ABF-RFI-001659R00 will help the contractor meet acceptance criteria. As of 4/10/2009, ZPMC has consistently demonstrated their ability to produce acceptable rat hole profiles without modification to the detail.	"Proposed Detail 1" is not acceptable. To simplify fabrication and amount of repair, the attached sketch "Proposed Detail 2" is acceptable provided that the 60mm dimension shown is revised to 25mm such that the long dimension of the slot is 60mm. For components that are already welded, it is acceptable to grind or arc-gouge and grind the as-built 35mm rat-hole to the weld profile shown in sketch "Proposed Detail No. 2" as modified above. The as-built weld shall be ground at the weld stops to remove existing discontinuities, and the welds shall be extended to the enlarged rat hole. The finished rat-hole shall again be ground smooth and shall pass MT.				S60	Resolved
181	10-Mar-09	The faying surfaces of the as-built support beams and channels bolted connections on and 9m and 13m internal diaphragms were not prepared to satisfy Class B slip-critical requirement. ABF understands that the use of		Changxing Island, Shanghai, PRC	ABF-RFI-001643R00	Design proposed to either tighten the bolted connections to the tension requirements in the special provisions (faying surfaces need not satisfy Class-B requirements) or leave the bolted	The Contractor's proposal to snug tight the bolted connections of Tower 9m and 13m internal diaphragms support beams and channels is not acceptable. As discussed in the Tower Meeting					S60	Resolved

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		high strength bolts implies slip critical connection requirements; however, this area is dominated by welded joints which appear to be the clearest load path. ABF intends to inspect the bolted connections to snug-tight requirements.				connections snug-tight and connect the support beams and channels with fillet welds equivalent to the bolts in shear capacity. ABF will proceed to tighten the bolted connections to the tension requirements in the Special Provisions.	on 2/24/09 at Changxing Island with ABF and Caltrans, it is understood that the faying surfaces of the as-built support beams and channels bolted connections were not prepared to satisfy Class B slip-critical requirement. Accordingly, the following options are acceptable: 1. Install high-strength bolts of the bolted connections to the required tension in accordance with the Special Provisions. The faying surfaces of the bolted connections need not satisfy Class B slip-critical requirement. 2. Install high-strength bolts of the bolted connections snug-tight, provided the shear tabs are connected to the support beams and channels with fillet welds equivalent to the bolts in shear capacity.						
187	11-May-09	QA randomly observed that ZPMC welder, ID 058792, was utilizing ZPMC Flux Cored Arc Welding WPS: WPS-B-T-4231-B-U3-F, to weld A709M grade HPS 485W and 345 steel plates on East Shaft, Lift 4, Skin Plate A at Weld Joint FASA4-2A/E-4B. WPS-B-T-4231-B-U3-F allows for a maximum material thickness of 75 mm. The material thickness welded was 90 mm. Also, as discussed with members of ABFJV and ZPMC on May 7, 2009, a PQR must be completed for welding A709M grade HPS 485W and 345 steel plates utilizing submerged arc welding (SAW) with a lower-strength filler metal.		Changxing Island, Shanghai, PRC	NCR-ZPMC-0237	ZPMC has removed the weld metal deposited with FCAW on East Tower, Lift 4, Skin A. The weld joint was rewelded using a qualified SMAW WPS on 5/18/2009. ZPMC has since qualified an SAW WPS using a lower-strength filler metal, which will be used for all future HPS 485W to 345 skin plate welds. The associated NCR has been resolved.	Issued to Contractor (NCT-229)					S60	Resolved
191	26-Apr-09	- During random verification Magnetic Particle Testing (MT) of weld ESD1-TL7B/L-3A/B, QA discovered one transverse linear indication with a length of approximately 15mm. The weld is located at the skin plates C & D interior corner seam of East Tower, Lift 2. The “Y” location is approximately 52.5 meters. - During random verification Magnetic Particle Testing (MT) of weld WSD1-FCSA3-2B/C-62A/B, QA discovered a 7mm long linear indication that had been previously inspected and accepted by ZPMC QC. The indication is located in West Shaft, Lift 3, Skin C. - During random verification Magnetic Particle Testing (MT) of East Tower, Lift 3, Skin Plate D, longitudinal stiffener welds, QA discovered a 30 mm long indication on weld ESD1-FDSA3-2 B/C-22. This weld was previously tested and accepted by ZPMC QC MT Technicians. - During random verification of West Tower, Lift 4, Skin C, QA discovered a linear indication along the total length of the toe in fillet weld designated as WSD1-FCSA3-2C/C-3,4. This weld was previously tested and accepted by ZPMC personnel. - QA discovered two 7mm long linear indications during random verification Magnetic Particle Testing (MT) of West Tower, Lift 1 doubler plate welds WSD1-SA39A/K-7 and WSD1-SA39B/K-6. These welds were previously tested and accepted by ZPMC QC MT Technicians. - QA discovered two linear indications, 15mm and 12mm in length, during random Magnetic Particle Testing (MT) of Lift 1, West Tower, Skin E, access portal doubler plate weld WSD1-SA225A/H-10. This weld was previously tested and accepted by ZPMC QC MT Technicians. - During random verification Magnetic Particle Testing (MT) of North Tower, Lift 1, QA discovered a 6mm long linear indication on 18m Diaphragm to Skin D weld NSD1-A112G/H-127. This weld was previously tested and accepted by ZPMC QC MT Technicians. - During random visual inspection of West Tower, Lift 4, Skin E, QA observed linear indications in the tack welds of weld joints WSD1-FESA4-A/F-24 and WSD1-FESA4-A/F-3A. The indications in the tack welds were verified with Magnetic Particle Testing (MT). These tack welds were previously accepted by ZPMC QC MT technicians. - During Magnetic Particle Testing (MT) of West Tower, Lift 1, Skin B doubler plate weld joint WSD1-SA279A/F-4, QA discovered one (1) round indication. ZPMC personnel excavated approximately 10mm deep for complete removal. This weld was previously tested and accepted by ZPMC QC MT technicians.		Changxing Island, Shanghai, PRC	ZPMC-0223;ZPMC-0234;ZPMC-0235;ZPMC-00250;ZPMC-0291;ZPMC-0293;ZPMC-0294;ZPMC-0295;ZPMC-0309;ZPMC-0318;ZPMC-0358;ZPMC-0359;ZPMC-0375;ZPMC-0376;ZPMC-0377;ZPMC-0383;ZPMC-0384;ZPMC-0386;ZPMC-0387;ZPMC-0388;ZPMC-0389;ZPMC-0390;ZPMC-0401;ZPMC-0408;ZPMC-0413	Contractor has provided a three-step resolution to prevent reoccurrence: - ABF has held verbal interview with ZPMC QA/QC and NDT Inspectors on several occasions to determine why MT indications are being missed. ABF has requested ZPMC to provide an analysis of missed indications to determine if they can be traced to a personnel trend, such as inspector, welded, location, etc. ABF has also informed ZPMC to ensure adequate lighting is provided during inspections. - If quality does not improve, tests will be administered to ZPMC MT technicians to demonstrate their ability to detect MT indications. - If the issue is still unresolved, ZPMC MT technicians will no longer be used to perform MT on this project. NDT results indicating sound welds have been submitted for the associated NCRs.	Issued to Contractor (NCT-216, NCT-226, NCT-227, NCT-241, NCT-280, NCT-282, NCT-283, NCT-284, NCT-298, NCT-307, NCT-347, NCT-348, NCT-363, NCT-364, NCT-366, NCT-371, NCT-372, NCT-374, NCT-375, NCT-376, NCT-377, NCT-378, NCT-387, NCT-397, NCT-399)					S60	Resolved

Filter ((Cat='Major Issues' OR Cat='Second-Tier Issues' OR Cat='Quality Management Issues') AND Location like '%shanghai%' AND (status='Pending' OR status='Briefing' OR status='Resolved' OR status='Void'))

Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
		- State letter 05.03.08-000020 has been issued to ABF requesting investigation why the MT indications have gone undetected and identification of responsible oversight personnel. - During Magnetic Particle Testing (MT) of North Tower Lift 1, Skin E, 38m Diaphragm to Fit Lug weld, designated as NSD1-A166F/J-90, QA discovered a 10mm long linear indication. This weld was previously tested and accepted by ZPMC MT Technicians. - During Magnetic Particle Testing (MT) of weld joints WSD1-A115-D/J-14, 73, 60, 165, 198, 222 and 224 at West Tower, 28m Diaphragm Fit Lugs, QA discovered seven (7) rejectable linear indications measuring approximately 8 to 26 mm in length. These welds were previously tested and accepted by ZPMC QC MT technicians. - During Magnetic Particle Testing (MT) of South Tower, Lift 3, Padeye weld SSD1-FASA3-1A/E-14, QA discovered two linear indications approximately 15 and 12mm in length. This weld was previously tested and accepted by ZPMC NDT personnel. - During Magnetic Particle Testing (MT) of strut welds WD1-A467-18M-2-53 and WD1-A467-38M-1-88, QA discovered transverse linear indications measuring approximately 13mm and 5mm in length. These welds were previously accepted by ZPMC QC personnel. - During Magnetic Particle Testing (MT) of South Tower, Lift 1, Skin A pad eyes, QA observed linear indications at weld joints SSD1-SA159A/J-25 & SSD1-SA159A/J-28. ZPMC MT Technicians had previously tested and accepted 10% of the pad eye welds. After QA foun											
192	26-Apr-09	During a Final Visual Inspection, QA observed that Kink Plate p650 appeared to be in the wrong location. P650 is welded to Longitudinal Stiffener p1485 and Skin Plate E between the 77 m and 80.75 m Diaphragms in East Tower, Lift 2. During a Final Visual Inspection per ZPMC NDT Inspection Notification Sheet 002605, QA observed that Kink Plate p650 appeared to be in the wrong location. P650 is welded to Longitudinal Stiffener p1485 and Skin Plate E between the 77 m and 80.75 m Diaphragms in East Tower, Lift 2. The location specified in the shop drawings is 29540.4 mm from the bottom of p1485. The as-welded location is 29636 mm.		Changxing Island, Shanghai, PRC	ZPMC-0224;ABF-RFI-001723R00	As per ABF-RFI-001723R00, it is acceptable to leave the stiffener kink and kink plate in the as-built location.	Issued to Contractor (NCT-217) ABF-RFI-001723R00 response: It is acceptable to leave the fabricated kink in Stiffener E2 as built 90mm higher than per plan provided the End PL elevtaion is consitent with approved shop drawings. The Contractor shall submit the affected drawings via the FCN process.				S60	Resolved
193	26-Apr-09	QA observed that the contractor has performed heat straightening of Longitudinal Stiffener LS3-6IN. ZPMC exceeded the maximum heat input limits causing base metal to melt and crater.		Changxing Island, Shanghai, PRC	ZPMC-0225	The affected portion of the stiffener has been removed and a new piece has been spliced in its place. NDT results indicating a sound weld and documentation noting the fabrication change have been submitted. The new weld # NSD1-FASA3-1E/E-A/B-1 is noted in the Contractor's response to the NCR. The associated NCR has been resolved.	Issued to Contractor (NCT-215)				S60	Resolved
197	05-May-09	During random verification Ultrasonic Testing (UT) of Tower Strut Component #WD1-A 467-28M-3, QA discovered a Class A indication approximately 16mm in length and at a depth of 19mm. This weld was previously tested and accepted by ZPMC QC UT Technicians.		Changxing Island, Shanghai, PRC	ZPMC-0236	Repair has been performed and an Ultrasonic Testing (UT) Report, indicating sound weld, has been submitted. The strut has been green tagged and the associated NCR has been resolved.	Issued to Contractor (NCT-228)				S60	Resolved
199	17-May-09	- QA performed random internal visual inspection of East Tower, Lift 1 between 43m and 47.6m diaphragms after grit blasting. It was observed that steel backing tack welds were cracked for 47.6m diaphragm to diaphragm insert plate CJP welds at Skin AE and ED corners. ZPMC personnel did not weld a continuous fillet the full length of the steel backing. ZPMC backing for Weld ESD1-A165 H/J-016 did not run the full length of the weld. It was also noted that gouges up to 4 mm were found at steel backing tack weld locations. - During random visual inspection of East Tower, Lift 1, after grit blasting, QA observed that tack welds used to attach steel backing were placed external to the weld joint but were not made by continuous fillet welding for the full length of the backing plate at weld joint ESD1-A165F/J-97. This weld was previously tested and accepted by ZPMC personnel. - During random after-blast visual verification of East Tower, Lift 1, QA observed that there was no backing bar		Changxing Island, Shanghai, PRC	ZPMC-0242;ZPMC-0247;ZPMC-0252;ZPMC-0296;ZPMC-0385;ZPMC-0638	QA is dedicating more resources to inspect backing bars on diaphragm AE & ED corner insert plate CJP welds in all tower shaft assemblies. Contractor plans to remove all tack welds on affected backing bars. Weld joint with missing backing bars are gouged from the backing bar side and rewelded. NDT results will be submitted for resolution of associated NCRs. NDT results indicating sound welds have been submitted and all associated NCRs have been resolved.	Issued to Contractor (NCT-233, NCT-238, NCT-249, NCT-285, NCT-373, NCT-629)				S60	Resolved

Filter ((Cat='Major Issues' OR Cat='Second-Tier Issues' OR Cat='Quality Management Issues') AND Location like '%shanghai%' AND (status='Pending' OR status='Briefing' OR status='Resolved' OR status='Void'))

Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
		at 18m diaphragm weld joint ESD1-A167G/H-141. - During random visual after blast inspection of South Tower, Lift 1, QA observed that there are no backing bars on diaphragm corner piece welds SSD1-A164H/J-194 & SSD1-A164G/J-215. These welds were previously accepted by ZPMC QC Personnel.During Ultrasonic Testing (UT) of the South Tower, Lift 3 welds SST13-1C/K-96 & 97, QA discovered that backing bars have been attached with intermittent fillet welds outside of the weld joints. These weld joints were previously tested and accepted by ZPMC Quality Control Personnel. - During Ultrasonic Testing (UT) of the South Tower, Lift 3 welds SST13-1C/K-96 & 97, QA discovered that backing bars have been attached with intermittent fillet welds outside of the weld joints. These weld joints were previously tested and accepted by ZPMC Quality Control Personnel.Partial Backing Bar Removal, South Tower Lift 4, A/E Corner Backfill Plate. - During Ultrasonic Testing (UT) of A/E corner backfill plate of South Tower Lift 4, QA observed that the backing had been partially removed at welds SSTL4-1C/L-40 (119M bottom diaphragm plate) and SSTL4-1F/L-100 (123M top diaphragm plate).										
201	04-May-09	- QA observed ZPMC personnel not preheating prior to air carbon arc gouging on SPCM material. The affected members are strut plates WD1-A467-28m-4-9, WD1-A467-33m-3-9, WD1-A467-33m-4-10, WD1-A467-33m-4-9, and WD1-A467-23m-4-10. - QA observed ZPMC personnel welding West Tower, Skin A, Lift 3 stiffener to skin plate without the required base material preheat. - QA observed ZPMC personnel welding North Tower, Skin E, Lift 3 doubler plate welds NSD1-FESA3-1D/D-9, NSD1-FESA3-1DD-18 and NSD1-FESA3-1C/D-9 without the required base metal preheat of 180 degree Celsius. - QA observed tack welding without adequate pre-heat on tower diaphragm weld joint SSD1-DPSA4-7 B/B-5. The recorded temperature at the tack weld and adjacent base material was 100 degrees Celcius. The required pre-heat temperature according to approved WPS is 180 degrees Celcius. - QA observed ZPMC personnel welding North Tower, Lift 2, Skin A doubler plate weld NSD1-SA166B/F-6 without preheating the weld and adjacent base material. - QA observed ZPMC weld repairing Type 3 Strut weld ND1-A468-38-1-44 without preheating the weld and adjacent base material. - QA observed ZPMC performing weld repairs of North Tower, Lift 1, CD interior corner seam weld NSD1-A166E/J-124A/B without adequate preheat of the adjacent base material. A 160 degree Celsius temperature crayon did not melt when applied to the adjacent base material. - QA observed Submerged Arc Welding without proper pre-heat at Strut Type 3 Web Plate weld joints NSD1-A6002-13,14,15-2A. The recorded temperature at the weld and adjacent base metal was less than the 180 degrees Celcius required by the approved WPS. - QA observed that welder #053916 was performing Shield Metal Arc Welding (SMAW) on weld joint WSD1-FCSA4-2C/C-14B, skin C, longitudinal stiffener, Lift 4, West Tower,without proper preheat. The recorded temperature of the adjacent base material was less than the 180 degrees Celcius required by approved Welding Procedure Specification WPS-B-T-3212-TC-U5b-1. -QA observed that ZPMC was performing Shield Metal Arc Welding(SMAW)without adequate preheat on longitudinal stiffener weld joints designated as WSD1-FCSA4-4D/D-28A & 56A, skin C, Lift 4, West shaft. The welders were identified as #040733 and #040690. The recorded temperature at the adjacent base material was less than 180 degrees Celcius- .		Changxing Island, Shanghai, PRC	ZPMC-0202;ZPMC-0233;ZPMC-0249;ZPMC-0251;ZPMC-0259;ZPMC-0262;ZPMC-0275;ZPMC-0319;ZPMC-0326;ZPMC-0346;ZPMC-0421;ZPMC-0588;ZPMC-0585;ZPMC-0568;ZPMC-0751	Propose a resolution for the systematic non-conformance including documentation that the welds placed are in compliance with the Contract requirements. In addition to Production's failure to perform the required preheat of the base material, address the failure of QC to identify the lack of preheat. Provide documentation of the steps/actions taken with Production and QC to prevent future occurrence.	Issued to Contractor (NCR-ZPMC-202,233,249,251,259,262,275,319,316,346,421,588,585,568,751)				S60	Pending

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		- During in-process visual inspection of South Tower, Lift 2, 53 m diaphragm to support platform bracket welds, QA observed ZPMC personnel performing tack welding without preheating the base metal. The Welding Procedure Specification (WPS) used requires a minimum preheat of 65 degrees C. - During in-process Visual Testing (VT), QA observed ZPMC personnel performing Flux Cored Arc Welding (FCAW) on temporary attachment of South Shaft, Lift 5, Skin E, without sufficient base metal preheat. A 160 degree Celsius Temp-stick temperature mark did not melt when the mark was applied to the adjacent base material within approximately 30mm from the point of welding. - During in-process Visual Testing (VT), QA observed ZPMC personnel performing Shielded Metal Arc Welding (SMAW) of West tower, lift 4, skin D weld WST4-2I/L-91 without sufficient base material preheat. A 149 degree Celsius Tempilstik temperature indicator mark applied to the adjacent base material within approximately 30mm from the point of welding did not melt. WPS-345-SMAW-1G(1F)Repair requires a minimum preheat temperature of 160 degree Celsius. - During in-process Visual Testing (VT) of South Tower, Lift 2, Skin C, QA observed ZPMC personnel performing Shielded Metal Arc Welding (SMAW) of partial joint penetration weld attaching a temporary lifting eye plate without sufficient base material preheat. A 110 degree Celsius Tempilstik temperature indicator mark applied to the adjacent base material within approximately 30mm from the point of welding did not melt. -QA Inspector observed ZPMC personnel performin											
202	26-May-09	QA observed tack welding without adequate pre-heat on tower diaphragm weld joint SSD1-DPSA4-7 B/B-5. The recorded temperature at the tack weld and adjacent base material was 100 degrees Celcius. The required pre-heat temperature according to approved WPS is 180 degrees Celcius.		Changxing Island, Shanghai, PRC	ZPMC-0251								Void
203	09-Jun-09	QA observed that ZPMC personnel had performed Magnetic Particle Testing (MT) over a film of residual couplant from prior Ultrasonic Testing (UT) on longitudinal stiffener butt welds SSD1-FCSA4-1A/C-66A, NSD1-FESA4-3A/F-15A and NSD1-FDSA4-3A/C-11A. This layer of couplant prevents magnetic particles from moving freely on the surfaces of the welds.		Changxing Island, Shanghai, PRC	ZPMC-0274	ZPMC has instructed NDT technicians to ensure that all residual couplant and other contaminants be removed prior to MT. Furthermore, the affected welds were cleaned, reinspected, and NDT documentation indicating sound welds has been submitted. The associated NCR has been resolved.	Issued to Contractor (NCT-264)					S60	Resolved
204	31-May-09	QA observed ZPMC personnel welding North Tower, Lift 2, Skin A doubler plate weld NSD1-SA166B/F-6 without preheating the weld and adjacent base material.		Changxing Island, Shanghai, PRC	ZPMC-0259								Void
205	03-Jun-09	QA observed ZPMC personnel welding Type 3 Strut weld ND1-A468-38-1-44 without preheating the weld and adjacent base material.		Changxing Island, Shanghai, PRC	ZPMC-0262								Void
206	26-May-09	During random after-blast visual verification of East Tower, Lift 1, QA observed that there was no backing bar at 18m diaphragm weld joint ESD1-A167G/H-141.		Changxing Island, Shanghai, PRC	ZPMC-0252								Void
207	14-Jun-09	QA discovered an 8mm long linear indication during random verification visual inspection of West Tower, Lift 1, Skin C Stiffener to fit lug weld WSD1-A115G/J-105. This weld was previously accepted by ZPMC QC personnel. QA observed a 12mm deep gouge in 38m diaphragm to skin E weld during after grit blast random visual verification of South Tower, Lift 1. This weld was previously accepted by ZPMC QC personnel. During random verification Visual Inspection of West Tower, Lift 1, QA discovered a linear indication on 43m diaphragm to fit-lug weld WSD1-A115G/J-174. This weld was previously accepted by ZPMC QC personnel. During in process Visual Inspection, QA discovered five linear indications on the tack welds of West Shaft, Lift 4, Skin D at weld joints WSD1-FDSA4-4A/D-8A/B and WSD1-FDSA4-4A/D-20/21. These welds were previously visually accepted by ZPMC QC personnel.		Changxing Island, Shanghai, PRC	ZPMC-0292;ZPMC-0297;ZPMC-0308;ZPMC-0317	Welds have been repaired, NDT results indicating sound welds have been submitted, and all of the associated NCRs have been resolved.	Issued to Contractor (NCT-281, 286, 287, 305)					S60	Resolved

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208	29-Jun-09	During in-process inspection of Lift 4, East Tower, Skin E, QA randomly observed two excavations at weld joint ESD1-FESA4-2A/F-13A(B) between 90mm plate FE4-13 and 75mm plate FE4-1. The excavations were made in the base and weld metals to allow for fit up of Longitudinal Stiffeners E1 and E2 to Skin Plate E. The repair procedure was not submitted nor approved by the Engineer at the time of repair.		Changxing Island, Shanghai, PRC	ZPMC-0310	Contractor has submitted a CWR stating that the base metal was ground in error. The excavated material has been filled with weld metal and ground smooth, as per the CWR disposition. NDT was performed by QA to verify the soundness of the repaired material and the associated NCR has been resolved.	Issued to Contractor (NCT-299)					S60	Resolved
209	30-Jun-09	ABF-RF1-001793R00: “Please be informed the current Strut Half Width Flange Splice Plate shop drawings (i.e. ND1-A692) detailed the 12x12 chamfer (for avoiding Diaphragm Web weld) at the incorrect corner. They should be detailed at the opposite corner as shown o the updated Contract Drawings 564SIC & 566SIC as attached. ZPMC has made 12x12 chamfer as according to the current shop drawings, and to rectify this, ZPMC proposed to chamfer the rest of the corners of the Strut Half Width Splice Plate (All 4 corners to be 12x12 chamfered).”		Changxing Island, Shanghai, PRC	ABF-RFI-001793R00	Revised shop drawing were submitted in ABF-SUB-000464R10 (Sheet numbers ED1-STSA3-6, ED1-STSA3-7, SD1-STSA3-4, SD1-STSA3-8). ABF-RF1-001793R00 Response: “The Contractor’s proposal to make 12x12 chamfer at all four corners of the Strut Half Width Flange Splice Plate for Strut Types 1, 2 and 3 is acceptable, provided that the minimum edge distance, measured from the center of the outermost bolt line to the outer edge of the plate, be maintained at 50mm at final erection. There is no change to the Fabrication Procedures due to this RFI.”	ABF-RF1-001793R00 Response: “The Contractor’s proposal to make 12x12 chamfer at all four corners of the Strut Half Width Flange Splice Plate for Strut Types 1, 2 and 3 is acceptable, provided that the minimum edge distance, measured from the center of the outermost bolt line to the outer edge of the plate, be maintained at 50mm at final erection. There is no change to the Fabrication Procedures due to this RFI.”				S60	Resolved
210	31-Jul-09	ZPMC welders have been observed performing FCAW weld passes with excessive width in flat and/or vertical positions. Furthermore, ZPMC QC personnel failed to observe and prevent welders welding outside of WPS parameters.		Changxing Island, Shanghai, PRC	ZPMC-0321;ZPMC-0620;ZPMC-0489	Contractor to propose a resolution for the identified non-conformance including documentation that the welds placed are in compliance with the Contract requirements. In addition, propose resolutions that address the failure of QC to identify the excessive weld pass width, and measures to prevent recurrence.	Issued to Contractor (NCR's-ZPMC-321, ZPMC-620, ZPMC-489)					S60	Pending
211	30-Jul-09	QA observed that ZPMC personnel had performed heat straightening on East and South Towers in a manner not in accordance with the ZPMC Welding Quality Control Plan (WQCP). Heat straightening procedures not outlined in the WQCP require prior Engineer approval.		Changxing Island, Shanghai, PRC	ZPMC-0320	The HSR and associated NDT documentation were provided. In the future ZPMC will request Engineer approval when the procedure is not in the WQCP.	Issued to Contractor (NCT-309)					S60	Resolved
214	06-Sep-09	ZPMC has been observed performing steel plate straightening with unapproved mechanical methods, including cold bending and active force heat straightening on Seismic Performance Critical Members(SPCM).		Changxing Island, Shanghai, PRC	ZPMC-0374;ZPMC-0611;ZPMC-0671	-For NCR ZPMC-0374, the material in question is to be rejected. Also,Contractor to propose a resolution to the non-conformance addressing the quality management failure and measures to prevent recurrence. -For NCR ZPMC-0611, Contractor to provide documentation to confirm the affected weld meets the testing requirements. Also, propose a resolution to the non-conformance addressing the quality management failure and measures to prevent recurrence.	Issued to Contractor (NCR ZPMC-374, ZPMC-611)					S60	Pending
215	21-Sep-09	ZPMC has been observed performing free hand thermal cutting on various Tower components at locations where access for mechanical guides is not restricted.		Changxing Island, Shanghai, PRC	ZPMC-0391;ZPMC-0412;ZPMC-0436;ZPMC-0442;ZPMC-0608	Contractor is to propose a resolution for the identified non-conformance, documenting that the affected area have been brought in compliance with the Contract requirements. In addition, regarding the material/workmanship non-conformance, propose a resolution for the identified non-conformance that addresses the failure of Quality Control to identify the deficiency. Contractor also have to provide documentation of the steps/actions taken by the QC Manager with regard to both Production and QC to prevent recurrence.	Issued to Contractor NCR ZPMC-391,ZPMC-412,ZPMC-436,ZPMC-442,ZPMC-608,					S60	Pending
216	17-Sep-09	During Ultrasonic Testing (UT) of the South Tower, Lift 3 welds SST13-1C/K-96 & 97, QA discovered that backing bars have been attached with intermittent fillet welds outside of the weld joints. These weld joints were previously tested and accepted by ZPMC Quality Control Personnel.		Changxing Island, Shanghai, PRC	ZPMC-0385	Contractor to provide a resolution to prevent recurrence.	Issued to Contractor (NCT-373)					S60	Void
217	18-Sep-09	During the Team China Tower meeting with ABF on September 8th, the Contractor stated that traceability was lost for 58 strut connection angles designated as WD1-SA183, ED1-SA183, WD1-SA250, & ED1-SA250. The stamps identifying each piece were milled off during machining and the angles were subsequently red tagged by the Contractor. The traceability is a requirement in Special Proisions, Section 10-1.59, Steel Structures, Materials: "Full traceability between the material test report and the final location in the structure shall be maintained for all Shear Link and Pipe Beam grades of steel." On September 10th, ABF stated that traceability was		Changxing Island, Shanghai, PRC		52 of 58 strut connection angles were accepted. The six rejected connection angles are limited to the following piece IDs: WD1-SA183-43M-3, ED1-SA183-23M-3, ED1-SA183-43M-1, ED1-SA183-43M-4, ED1-SA183-47.6M-1, & SA183-47.6M-4.	The strut connection angle traceability has been reestablished and they are acceptable.					S60	Resolved

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Issue No	Date Initiated	Summary	WBS	Location	Initiated By	Proposed Resolution/Status	Construction Response	Design Response	CCO	Cost/Credit	Material	SMR #	Status
		reestablished for 52 of the 58 affected strut angles as pen marking were discovered on the unmachined side surfaces of angles. The following day, METS met with ABF QC and verified that the methodology for reestablishing traceability is sound. The pen marks were identifyable and matched the new stamped piece marks. On September 17th, METS, Construction, and Design representatives met and concluded that the strut connection angles are traceable and acceptable. The contractor was notified that the 52 angles are acceptable the following day. The remaining 6 that could not be traced were rejected.											
218	16-Sep-09	On September 16th, it was observed that the State Furnished T1 Anchorage Template had an irregularly sized hole on Area A, the South-East quadrant. The other nine (9) dowel holes in the vicinity measure approximately 146 mm in diameter, while the irregular hole measures approximately 162 mm in diameter. The center of the as-fabricated hole has a 6 mm offset from the centerline created by the other nine holes. The spacing between the hole centers appears to be regular, despite the increased diameter. The approximate center spacing from holes 1 to 10 is as follows: 336, 287, 335, 290, 335, 295, * 331, 292, 332 mm. * indicates the location of the irregular hole. The location is designated as anchor hole #8 on plate P162-2, as indicated by the "Pier 1 Steel Template/Field Template Key," submitted in ABF-RFI-001229R00.		Changxing Island, Shanghai, PRC		Survey data of the as-built T1 anchorage was looked into to determine the actual position of the irregular hole. It was determined that the position of the #8 hole on plate P162-2 with a 6 mm offset from the centerline was deemed acceptable at KOS, when the template was fabricated. The contractor is to proceed marking the base plate and cutting the dowel hole based on the as-fabricated location.	The contractor has been informed that P162-2-8 is acceptable as marked per the State Furnished Template.					S60	Resolved
219	21-Sep-09	The Contractor has allowed welds to be evaluated to the incorrect Ultrasonic Testing (UT) criteria throughout various Tower component welds. This is leading to the repair of welds with non-rejectable indications causing unnecessary thermal cycles or not meeting contract NDT requirements by accepting indications that are rejectable. The following Critical Welds Repairs (CWR) have been submitted indicating that the welds were originally tested to the incorrect UT criteria, as specified in AWS D1.5-2002: CWR - Weld Location - Criteria Used - Criteria Required T-CWR 104 - Tower Skin to Skin Corner Seam - Table 6.3 - Table 6.4 T-CWR 105 - Longitudinal Stiffener to Skin - Table 6.3 - Table 6.4 T-CWR 107 - Longitudinal Stiffener to Skin - Table 6.3 - Table 6.4 T-CWR 122 - Tower Skin to Skin Corner Seam - Table 6.3 - Table 6.4 T-CWR 175 - Diaphragm Plate Weld - Table 6.4 - Table 6.3 T-CWR 215 - Diaphragm Plate Weld - Table 6.4 - Table 6.3 T-CWR 216 - Diaphragm Plate Weld - Table 6.4 - Table 6.3 T-CWR 217 - Diaphragm Plate Weld - Table 6.4 - Table 6.3 T-CWR 218 - Diaphragm Plate Weld - Table 6.4 - Table 6.3 T-CWR 230 - Interior Corner Splice Plate Welds - Table 6.3 - Table 6.4 T-CWR 231 - Interior Corner Splice Plate Welds - Table 6.3 - Table 6.4 T-CWR 232 - Interior Corner Splice Plate Welds - Table 6.3 - Table 6.4 T-CWR 233 - Interior Corner Splice Plate Welds - Table 6.3 - Table 6.4 T-CWR 234 - Interior Corner Splice Plate Welds - Table 6.3 - Table 6.4 T-CWR 237 - Interior Corner Splice Plate Welds - Table 6.3 - Table 6.4 T-CWR 247 - Interior Corner Splice Plate Welds - Table 6.3 - Table 6.4		Changxing Island, Shanghai, PRC	ZPMC-0392	The affected welds have been retested using the appropriate acceptance criteria and repaired, if necessary. The associated NCR has been resolved.	Issued to Contractor (NCT-381)					S60	Resolved
220	17-Sep-09	The following is based on hand measurements performed on East & South Towers during horizontal trial assembly during September 3-16, 2009: - All gaps between Lift 1 skin plate longitudinal stiffeners and interior splice plates indicated that all gaps were within 0-10mm. It was also observed that East Tower longitudinal stiffeners C2 and C4 were milled to allow		Changxing Island, Shanghai, PRC		Use methods described in ABF-RFI-001888R00 to cope with the fitment issues.						S60	Resolved

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		fitment. The bolt center to edge distance minimum of 40mm, based on ABF-RFI-001888R00, were maintained at the milled locations. - The following locations between South Tower, Lift 1 skin plate longitudinal stiffeners and interior splice plates with misalignments greater than 2mm (but less than 5mm) were observed: A2, A3, C2, C4, C5, D4, & E3. East Tower: A1, A2, B2, D2, D4, E1. These locations will potentially require shimming during erection. - The misalignment at East Tower, Lift 1, A4 was measured to have up to 7mm of misalignment. This location will require shimming and an additional 10 mm fill plate for the entire length of the bolted connection, as per ABF-RFI-001888R00.										
221	23-Sep-09	During in-process Visual Testing (VT) of North Tower, Lift 4, Skin D, Stiffener Connection Plate welds, QA observed that 4G (Overhead Groove weld) tack welds were being welded by a welder (#052892) with a 4F (Fillet) welding qualification. The welder was utilizing WPS-B-T-4314-TC -P5-2, which is a 4G SMAW WPS.		Changxing Island, Shanghai, PRC	ZPMC-0400	ZPMC indicated that the welder was qualified to perform SMAW tack welds in both 4F and 4G positions. The associated NCR has been resolved.	Issued to Contractor (NCT-386)				S60	Resolved
222	28-Sep-09	The location of Stiffener C3 Slot on 127m bottom diaphragm plates is incorrect, causing 12mm of interference with the C3 longitudinal stiffeners. ZPMC proposes to widen the slots 15mm as a remedial solution.		Changxing Island, Shanghai, PRC	ABF-RFI-001896R00	ZPMC proposal to widen the slots 15mm is acceptable.	The contractors proposal is acceptable.				S60	Resolved
223	05-Oct-09	- During Ultrasonic Testing (UT) of Strut Web Connection Angle weld joint ED1-SA183-38M-4, QA discovered class “A” rejectable indications measuring approximately 12mm and 10mm in length. This weld was previously tested and accepted by ZPMC Quality Control (QC) UT technicians (NDT Inspection Notification Sheet #004346).During Ultrasonic Testing (UT) of weld joint WD1-A6003-2-11, QA discovered a class “A” indication measuring approximately 21mm in length. This weld was previously tested and accepted by ZPMC Quality Control (QC) UT technicians (NDT Inspection Notification Sheet # 004549). - During Ultrasonic Testing (UT) of weld joint WD1-A6003 -2-11, QA discovered a class “A” indication measuring approximately 21mm in length. This weld was previously tested and accepted by ZPMC Quality Control (QC) UT technicians (NDT Inspection Notification Sheet # 004549).		Changxing Island, Shanghai, PRC	ZPMC-0414;ZPMC-0443	The affected welds have been repaired, NDT reports indicating sound welds have been submitted, and the welds has been green tagged. The associated NCRs have been resolved.	Issed to Contractor (NCT-403, NCT-433)				S60	Resolved
224	08-Oct-09	During in-process Visual Inspection (VT), QA observed South Tower, Lift 4 being rotated utilizing steel cables supported by temporary attachments. The approved Tower Shaft Fabrication Procedure outlines a procedure utilizing "rotisserie rings" and a chain roller system. During in-process Visual Inspection (VT), QA observed that East Tower, Lift 4 had been rotated utilizing steel cables supported by temporary attachments. The approved Tower Shaft Fabrication Procedure outlines a procedure utilizing "rotisserie rings" and a chain roller system.		Changxing Island, Shanghai, PRC	ZPMC-0415;ZPMC-0418	A revised fabrication procedure (ABF-SUB-000285R04) outlining the new shaft rotating method has been submitted and subsequently approved as noted. The associated NCRs have been resolved.	Issued to Contractor (NCT-404)				S60	Resolved
225	18-Oct-09	During in-process visual inspection of repairs performed on strut connection angle welds ND1-A5002-26-1A/B, ND1-A5002-31-1A/B, ND1-A5002-20-1A/B and ND1-A5002-24-1A/B, QA observed ZPMC personnel using Welding Procedure Specification WPS-485-SMAW-2G(2F)-REPAIR-1. Strut angle welds are Seismic Performance Critical Members (SPCM) and should therefore be treated as Fracture Critical Members (FCM). The proper procedure for this repair is WPS-485-SMAW-2G(2F)-FCM-REPAIR-1 as indicated in the associated Weld Repair Reports (WRR) T-WR2491, T-WR2496, T-WR2504 and T-WR2489.		Changxing Island, Shanghai, PRC	ZPMC-0420	ZPMC has instructed QC to increase coverage of WPSs used for production and repair welding. The incorrect WPS used for the welding of the affected welds indcates the same welding paramters as the correct WPS. Furthermore, NDT documentation indicating sound welds has been submitted. The associated NCT has been resolved.	Issued to Contractor (NCT-411)				S60	Resolved
226	16-Oct-09	This general Blue Tag item references all the discovered Magnetic Particle Testing(MT)indications that did not meet the minimum acceptance criteria(missed, rejected, non-conforming).		Changxing Island, Shanghai, PRC	ZPMC-0419;ZPMC-0422;ZPMC-0437;ZPMC-0438;ZPMC-0439;ZPMC-0440;ZPMC-0603;ZPMC-0596;ZPMC-0573;ZPMC-0644;ZPMC-0679;ZPMC-0745;ZPMC-0790;ZPMC-0803;ZPMC-0804;ZPMC-0807;ZPMC-0823;ZPMC-0902	Each Blue Tag item will be addressed separately under the METS Discussion area along with current resolution status.	Issued to Contractor (NCR-ZPMC 419, ZPMC 422, ZPMC 437, ZPMC 438,ZPMC 439, ZPMC 440, ZPMC 603, ZPMC 596,ZPMC 573, ZPMC 644, ZPMC 679, ZPMC 745, ZPMC 790). Concurs with METS.				S60	Resolved

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227	20-Oct-09	During in-process Visual Testing (VT) of North Tower, Interior Splice Plate Skin to Stiffener weld NSD1-SPSA3-70-2A, QA observed that the CJP weld repair excavation depth exceeded 65% of the weld size. The 70mm thick plate was excavated approximately 50mm deep. A Critical Weld Repair (CWR) was not submitted for approval.		Changxing Island, Shanghai, PRC	ZPMC-0423	Critical Weld Repair (T-CWR-396) has been submitted and approved by the Engineer. The associated NCR has been resolved.	Issued to Contractor (NCT-413)					S60	Resolved
228	21-Sep-09	During In-Process Visual Testing (VT) of weld repairs on North Tower, Lift 3, AB corner seam weld NSTL3-3B/K-83, QA observed that the temperature of adjacent base metal was above the maximum allowable interpass temperature (230 C). A 230 degrees Celsius temperature crayon melted when applied to the adjacent base material. The repair was being performed in presence of ZPMC Quality Control Personnel.		Changxing Island, Shanghai, PRC	ZPMC-0393	ZPMC has instructed the production personnel to improve the control of interpass temperature. Furthermore, NDT reports have been submitted indicating that the affected weld is sound.	Issued to Contractor (NCT-380)					S60	Resolved
229	03-Nov-09	ZPMC Quality Control (QC) and Production Personnel have failed to improve repair grinding of rejectable weld areas on Tower Struts and Connection Angles, as indicated by Critical Weld Repairs (CWR) dating back to 4/29/2009 (T-CWR123). One of the causes of rejectable Ultrasonic Testing (UT) indications has been repeatedly identified as "the grinder was not observant during the grinding operation resulting in the indications not being completely removed" in the CWR "Cause" section. Furthermore, CWRs of up to revision 2, issued for up to fourth-time repairs, identify the aforementioned cause in each revision.		Changxing Island, Shanghai, PRC	ZPMC-0441	The cause of the rejectable Ultrasonic Testing (UT) indications in repaired welds has been found to be incorrectly identified defect locations, leading to excavations not encompassing the entire defect. To prevent recurrence of rejectable UT indications in repaired welds, QC and production personnel have been instructed to properly identify the defects and make the X, Y coordinates and depth on the weld surface. The markings are then to be confirmed by UT to ensure they include the entire defect, prior to excavation. The associated NCR has been resolved.	Issued to Contractor (NCT-431)					S60	Resolved
230	02-Feb-10	Partial Backing Bar Removal, South Tower Lift 4, A/E Corner Backfill Plate.		Changxing Island, Shanghai, P.R. China	ZPMC-0638								Void
231	30-Jan-10	ZPMC has been observed performing base metal repairs on various Tower components without prior Engineer's approval.		Changxing Island, Shanghai, P.R. China	ZPMC-0636;ZPMC-0633;ZPMC-0623;ZPMC-0586;ZPMC-0559;ZPMC-0548;ZPMC-0490;ZPMC-0696	Contractor to propose a resolution for the identified non-conformance, documenting that the repaired base metal/welding repairs are in compliance with the Contract requirements. Documentation provided for Engineer's review of the acceptability of the weld repairs shall at a minimum unclude repair procedure utilized/CWR or WWR where appropriate and the NDT results. In addition to the material/workmanship non-conformance, address the failure by both Production and QC in proceeding with base metal repair without prior approval from the Engineer. Also provide documentation of the steps/actions taken bt Production and QC to prevent future occurences.	Issued to Contractor :NCR ZPMC-636,ZPMC-633,ZPMC-623,ZPMC-586,ZPMC-559,ZPMC-548,ZPMC-490,ZPMC-696,					S60	Pending
232	29-Jan-10	Base metal repair (buttering) without the Engineer's approval, SA3-438 longitudinal stiffener splice plate, north tower lift 2-3.		Changxing Island, Shanghai, P.R. China	ZPMC-0633								Void
233	25-Jan-10	Base Metal Repair without Engineer's Approval, East Tower, Lift 4, Skin E		Changxing Island, Shanghai, P.R. China	ZPMC-0623								Void
234	24-Jan-10	Excessive Weld Pass Width, South Tower Lift 4, Weld #SSTL4-1K/L-96		Changxing Island, Shanghai, P.R. China	ZPMC-0620								Void
235	19-Jan-10	During in-process Visual Testing (VT), QA observed that ZPMC relocated (removed from their original welded location) Pad Eyes on North Shaft, Lift 2, skins C & D (near C/D & B/C Corner), without prior Engineer notification.		Changxing Island, Shanghai, P.R. China	ZPMC-0614	Padeye welds were verified by MT (T787-MT-7944, 7941) to be free of defects. The associated NCR has been resolved (NCS-512).	Issued to Contractor (NCT-598)					S60	Resolved
237	18-Jan-10	During in-process Visual Testing (VT) of West Tower, Lift 4, BC corner seam welds WSTL4-2L/L-3A/B & WSTL4-2B/L-58A/Bm, QA observed ZPMC welding using WPS-345-FCAW-1G(1F)-REPAIR with Supercored 71H filler wire. The required filler wire for welding these joints is K-71TSR with WPS-345+485-FCAW-1G-REPAIR.		Changxing Island, Shanghai, P.R. China	ZPMC-0610	The weld metal was removed and rewelded with correct weld material. Subsequent MT & UT evaluations indicated sound welds.	Issued to Contractor (NCT-597)					S60	Resolved
238	17-Jan-10	Free hand thermal cutting on tower strut without Engineer's approval, South Tower Side		Changxing Island, Shanghai, P.R. China	ZPMC-0608								Void
239	12-Jan-10	Missed MT Longitudinal and Transverse Indications by QC located in East Tower Lift 4 diagonal plates		Changxing Island, Shanghai P.R. China	ZPMC-0603								Void
240	11-Jan-10	Missed MT Indication by QC in East Tower Lift 4 on Skin E		Changxing Island, Shanghai, P.R. China	ZPMC-0596								Void

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242	07-Jan-10	During the Quality Assurance (QA) random in-process visual inspection at inside of West Tower, Lift 4, 135m double diaphragm, top side, CT QA discovered the following issue: -Base metal repairs being performed in way of temporary attachment removal areas on the top of the double diaphragm skin without the prior approval of the Engineer.		Changxing Island, Shanghai, P.R. China	ZPMC-0586								Void
243	07-Jan-10	Caltrans Quality Assurance (QA) observed ZPMC personnel performing Shielded Metal Arc Welding (SMAW) of weld no:WST4-2I/L-91 attaching to diaphragm to fit lug inside of West tower, lift 4, skin D (75 mm thickness), without sufficient base material preheat. This work was observed at the 135m double diaphragm. CT QA observed a 149 degree Celsius Tempilstik temperature indicator mark applied to the adjacent base material within approximately 30mm from the point of welding did not melt. The applicable WPS No:345-SMAW -1G(1F)Repair requires minimum temperature of 160 degree Celsius.		Changxing Island, Shanghai, P.R. China	ZPMC-0585								Void
244	06-Jan-10	During in-process Visual Testing (VT) of West Tower, Lift 5, Skin A, QA observed ZPMC personnel performing Shielded Metal Arc Welding (SMAW) weld passes attaching a temporary lifting eye with the incorrect WPS. WPS-B-T-43(1)14, presented by ZPMC QC for the full-length weld passes performed, is a tack welding WPS and therefore not applicable.		Changxing Island, Shanghai, PRC									Void
245	05-Jan-10	During Magnetic Particle Testing (MT) of Tower Strut Web to Stiffener weld SD1-STSA3-1-99M-1-32, QA discovered one linear indication, transverse to the weld axis, approximately 10mm in length. Notice of Witness Inspection (NWIT) # 004999 indicates that ZPMC previously completed their 100% MT review on the affected weld.		Changxing Island, Shanghai, PRC	ZPMC-0573								Void
246	04-Jan-10	During in-process Visual Testing (VT) of South Tower, Lift 2, Skin C, QA observed ZPMC personnel performing Shielded Metal Arc Welding (SMAW) of partial joint penetration weld attaching a temporary lifting eye plate without sufficient base material preheat. A 110 degree Celsius Tempilstik temperature indicator mark applied to the adjacent base material within approximately 30mm from the point of welding did not melt.		Changxing Island, Shanghai, PRC	ZPMC-0568								Void
247	03-Jan-10	During in-process Visual Testing (VT) of North Tower, Lift 2, 65m Grating Bracket welds, QA observed welding being performed with a lapse in Quality Control (QC) Inspection exceeding 30 minutes. Welder # 215620 was performing Flux Cored Arc Welding (FCAW) with no ZPMC QC present between 7:50 and 8:40.		Changxing Island, Shanghai, PRC	ZPMC-0563	MT documentation indicating acceptable welds was provided (T787-MT-7980) and internal ZPMC NCR (NCR-7-082) was issued. The associated NCR has been resolved (NCS-513).	Issued to Contractor (NCT-557)				S60	Resolved
248	03-Jan-10	During in-process Visual Testing (VT) of West Tower, Skin D, Interior Splice Plate WSD1-SPSA3-3, QA discovered base metal repairs performed without prior Engineer approval.		Changxing Island, Shanghai, PRC	ZPMC-0559								Void
249	01-Jan-10	Base Metal Repair without Engineer's Approval, East Shaft, Lift 1, Skin A Stiffener		Changxing Island, Shanghai, P.R. China	ZPMC-0548								Void
250	22-Dec-09	During in-process Visual Testing (VT), QA observed base metal repairs on spare strut ND1-A6002-9 without Engineer approval. The base metal repairs were performed with Shielded Metal Arc Welding (SMAW) at eight (8) locations from 10 to 40 mm in length.		Changxing Island, Shanghai, PRC	ZPMC-0490								Void
251	17-Dec-09	During in-process Visual Inspection (VT), QA observed a 23mm FCAW weld pass, performed in the flat position, on CJP weld NSD1-SPSA4-18-2A/B. The maximum FCAW weld pass width allowed in the flat position for groove welds is 16mm.		Changxing Island, Shanghai, PRC	ZPMC-0489								Void
252	26-Nov-09	During in-process visual inspection of East Tower, Lift 4, CD corner seam weld repair excavation, QA observed a crack-like linear indication, transverse to the weld axis, approximate 6 mm in length. This excavation was for the repair of a rejectable indication found by ZPMC Ultrasonic Testing (UT) technicians. ZPMC NDT personnel performed Magnetic Particle Testing (MT) on the excavated area, confirmed the crack-like indication, and continued to perform Shielded Metal Arc Welding (SMAW) on the excavated area without prior approval of the Engineer.		Changxing Island, Shanghai, PRC	ZPMC-0458	The weld repair was performed and verified by NDT. Documentation for this repair was provided (T-CWR-497 and T-787-UT-2432R4). This issue was discussed with the foreman to prevent recurrence and the associated NCR has been resolved.	Issued to Contractor (NCT-448)				S60	Resolved

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253	04-Nov-09	During Ultrasonic Testing (UT) of weld joint WD1-A6003-2-11, QA discovered a class “A” indication measuring approximately 21mm in length. This weld was previously tested and accepted by ZPMC Quality Control (QC) UT technicians (NDT Inspection Notification Sheet # 004549).		Changxing Island, Shanghai, PRC	ZPMC-0443								Void
254	02-Mar-10	During Ultrasonic Testing (UT) of Tower Strut weld ED1-A6001-4-7B, QA discovered one (1) Class “A” nonconforming longitudinal indication measuring approximately 15 mm in length. The indication is in an area previously tested and accepted by ZPMC QC UT technicians.		Changxing Island, Shanghai, P.R. China	ZPMC-0660	Weld was repaired and verified with NDT. QA VT, MT, and UT was performed on 3/13/2010 (NWIT 5335) and the weld was green tagged (Tag #11727).	Issued to Contractor.					S60	Resolved
257	14-May-10	QA observed ZPMC performing base metal repair on Strut Angle ED1-SA4-143M-5 without Engineer Approval and utilizing the incorrect WPS. The welding was performed with WPS-485-SMAW-1G(1F)-Repair, while the WPS specified in the Welding Repair Report was WPS-485-SMAW-1G(1F)-FCM-Repair.		Changxing Island, Shanghai, P.R. China	ZPMC-0696								Void
258	21-Apr-10	Missed MT Indications by QC, Tower Lift 1, Skin C, Cable Tray Support		Changxing Island, Shanghai, P.R. China	ZPMC-0679								Void
259	13-May-10	This is a General Blue Tag to track issues related to removal of weld metal, base metal, fitted /welded components without notification to the Engineer.		Changxing Island, Shanghai, P.R. China	ZPMC-0695;ZPMC-0815;ZPMC-0817;ZPMC-0818;ZPMC-0852	Each Blue Tag item will be addressed separately under the METS Discussion area along with the current resolution status.	Issued to Contractor NCR’s ZPMC-0695, 0815, 0817, 0818, 0852.					S60	Pending
260	16-Apr-10	=QA inspector during Visual Testing(VT) observed thatZPMC welders performing weld repairs of improperly drilled holes without an approved Welding Procedure Specification (WPS). Furthermore, there was a lapse in QC CWI coverage of one hour. -During in process Visual Testing(VT)of West Tower, Lift 5, Skin A, QA inspector observed ZPMC personnel performed Shield Metal Arc Welding(SMAW)weld passes attaching a temporary lifting eye with the incorrect WPS. The WPS-B-T-43(1)14, presented by ZPMC QC is a tack welding WPS and is not applicable for the full length weld passes performed.		Changxing Island, Shanghai, P.R. China	ZPMC-0677;ZPMC-0579	Contractor to propose a resolution to confirm that the weld repair is in compliance with the Contract requirements, as a minimum, the approved weld procedure used and the results of the testing i.e NDT reports. The Contractor is also required to address the failure by both the Production and QC in proceeding with work without proper supervision and provide documentation of the steps/actions to prevent future occurrence	Issued to Contractor (NCR ZPMC-677, ZPMC-579)					S60	Pending
262	27-May-10	Gap Between Mill-to-Bear Surfaces, West Shaft, Lift 1		Changxing Island, Shanghai, P.R. China	ZPMC-0708								Void
268	07-Jul-10	This general Blue Tag item references all the discovered UT indications that did not meet the minimum acceptance criteria(missed, rejected or non-conforming)		Changxing Island, Shanghai, PR China	ZPMC-0749;ZPMC-0753;ZPMC-0795;ZPMC-0805;ZPMC-0810;ZPMC-0824;ZPMC-0910	Each Blue Tag item will be addressed separately under the METS Discussion area along with the current resolution status.							Pending
269	15-Feb-11	This general Blue Tag item references all the discovered MT indications that did not meet the minimum acceptance criteria(missed, rejected or non-conforming).		Changxing Island, Shanghai, PR China	ZPMC-0750;ZPMC-0789	Each Blue Tag item will be addressed separately under the METS Discussion area along with the current resolution status.							Pending
271	26-Jul-10	ZPMC welder personnel was observed performing Shielded Metal Arc Welding (SMAW) repair on Seismic Performance Critical Material (SPCM) without the Engineer's approval.		Changxing Island, Shanghai, P.R. China	ZPMC-0774	The repair was stopped as soon as the non-conformance was observed. Critical Repair Report(CWR)was submitted and approved. The Contractor is to submit NDT reports to prove the repair successfully. In addition, the welder and the QC involved are to be reprimanded and warned against future reoccurence.							Pending
274	11-Oct-10	This is a General Blue Tag to track fabrication performed without following approved working drawings and/or fabrication procedures.		Changxing Island, Shanghai, P.R. China	;ZPMC-0896;ZPMC-0897	Each Blue Tag item will be addressed separately under the METS Discussion area along with current resolution status.							Pending
275	19-Oct-10	This is a general Blue Tag to track unidentified material, material not approved by Engineer and material mis-used in fabrication.		Changxing Island, Shanghai, PR China	ZPMC-0829	Replace the plate in question, perform full check on the remaining shim plates and provide Material Test Report(MTR)for the remaining shim plates used for the particular application i.e Lift 3/Lift 4 splice.							Pending
279	23-Nov-10	During Quality Assurance and Quality Control Peer Review for the project in October 2009, Dave McQuaid and Don Rager directed all new welding including replaced welds shall be made in accordance with AWS D1.5 Bridge Welding Code, the Caltrans Special Provisions and their developed new "Weld Procedure Requirements". This Blue Tag Log tracks locations where this procedure has not been implemented.		Changxing Island, Shanghai, P.R. China	ZPMC-0862;ZPMC-0884;ZPMC-0885	Each Blue Tag item will be addressed separately under the METS Discussion area along with the current resolution status.	Issued to Contractor NCR's ZPMC-0862, 0884, 0885.						Pending

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